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This seminar was held to focus the attention of personnel in vocational education leadership positions on two major problems critical to further development and improvement of teacher education, with 215 participants from 43 states and the District of Columbia registering. Problem areas of teacher education for differentiated staffing and for teaching the disadvantaged were the topics for intensive study. Position papers were developed for presentations by two task forces in the problem areas. Major presentations were: (1) Educational Personnel Development Agency and Vocational Education, by D. Davies, (2) Vocational Teacher Education: Concerns, Concepts, and Commitments, by R.E. Taylor, (3) A Challenge for Action, by R. Evans, (4) Differentiated Staffing for Vocational-Technical Education, by D. Allen and P. Wagschal, and (5) Vocational-Technical Education for the Disadvantaged, by E.W. Gordon. Reactions of task force members to the presentations and summaries of the work of committees are included. Some supplementary items are; (1) a partial bibliography for teacher education of teachers for the disadvantaged, (2) guidelines and plans for the seminar, (3) the seminar program, (4) an evening film program, (5) summary of evaluations by participants, (6) a listing of the seminar staff, and (7) a list of seminar participants. (DM)

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NATIONAL TEACHER SEMINAR

OCTOBER 21 — 24, 1968

SHERATON-
CHICAGO
MOTOR
HOTEL
CHICAGO,
ILLINOIS

THE CENTER FOR VOCATIONAL
AND TECHNICAL EDUCATION
THE OHIO STATE UNIVERSITY
1900 Kenny Rd., Columbus, Ohio, 43212

VT007923

The Center for Vocational and Technical Education has been established as an independent unit on The Ohio State University campus with a grant from the Division of Comprehensive and Vocational Research, U. S. Office of Education. It serves a catalytic role in establishing consortia to focus on relevant problems in vocational and technical education. The Center is comprehensive in its commitment and responsibility, multidisciplinary in its approach, and interinstitutional in its program.

The major objectives of The Center follow:

1. To provide continuing reappraisal of the role and function of vocational and technical education in our democratic society;
2. To stimulate and strengthen state, regional, and national programs of applied research and development directed toward the solution of pressing problems in vocational and technical education;
3. To encourage the development of research to improve vocational and technical education in institutions of higher education and other appropriate settings;
4. To conduct research studies directed toward the development of new knowledge and new applications of existing knowledge in vocational and technical education;
5. To upgrade vocational education leadership (state supervisors, teacher educators, research specialists, and others) through an advanced study and inservice education program;
6. To provide a national information retrieval, storage, and dissemination system for vocational and technical education linked with the Educational Resources Information Center located in the U. S. Office of Education.

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GRANT NO. OEG-3-7-000158-2037

SECOND ANNUAL NATIONAL VOCATIONAL-TECHNICAL TEACHER EDUCATION SEMINAR. (2nd, Chica [illegible] 1968)

PROCEEDINGS

OCTOBER 21 THROUGH 24 CHICAGO, ILLINOIS

JAMES W. HENSEL, *Seminar Chairman*
GARRY R. BICE, *Assistant Chairman*

THE CENTER FOR VOCATIONAL AND TECHNICAL EDUCATION
THE OHIO STATE UNIVERSITY•1900 KENNY ROAD
COLUMBUS, OHIO 43212

JANUARY 1969

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PREFACE

Two hundred-fifteen participants from 43 states and the District of Columbia registered for the Second Annual National Vocational-Technical Teacher Education Seminar. The purpose of the seminar, conducted in Chicago from October 21-24, 1968, was to focus attention of the vocational education leadership on two major problems critical to the further development and improvement of vocational-technical teacher education. These problem areas of differentiated staffing and preparing teachers for the disadvantaged grew out of discussions at the First Annual Teacher Education Seminar sponsored by The Center in September 1967.

Two major task forces were commissioned by The Center in March 1968 to begin intensive study and the development of major position papers for discussion at the seminar. It was the intent of the seminar planning committee and The Center for Vocational and Technical Education staff to bring together national leaders and recognized experts in education to focus on these two major topics as they relate to vocational-technical teacher education. These leaders and experts served as task force members and resource persons and interacted with vocational-technical teacher educators in the appraisal of the two topics.

This report is a compilation of the presentations given during the seminar, reactions of task force members to the presentations, and summaries of the work of the committees. In addition, the two major papers developed by the task force members and distributed to seminar participants in advance of the seminar are included in this report.

Recognition is due to James W. Hensel, specialist in agricultural education at The Center for Vocational and Technical Education, who served as seminar chairman; to other members of The Center staff; and to members of The Ohio State University College of Education staff for their valuable assistance. Acknowledgment is also given the seminar planning committee whose members are recognized elsewhere in this report, to the members of the task forces, and to Garry R. Bice, research associate at The Center.

Robert E. Taylor
Director
The Center for Vocational
and Technical Education

INTRODUCTION

The Second Annual National Vocational-Technical Teacher Education Seminar was designed to challenge each participant to discuss and plan new and innovative programs. The seminar theme provided an opportunity for national leaders to focus their discussion on teacher education as it relates to two topics:

> *Differentiated Staffing*--the development, training, and utilization of various levels of professional and semi-professional staff in the total context of occupational teacher education.
>
> *Teaching the Disadvantaged*--the preparation of vocational and technical teachers to work with students with special needs.

The seminar format provided for two introductory sessions concerning the professional component of education followed by two sub-seminars with each considering one of the major themes and a merging of the two groups for the final presentations and summary.

A six member task force was commissioned to consider each topic. The task force met at The Center for Vocational and Technical Education and worked through the summer collecting information to assist the writer of the paper. The major papers and the seminar presentations represent a concerted effort by the task force members and should provide thought provoking alternatives for every participant.

New developments in vocational-technical education underscore the necessity for this type of concerted attack on the problems of developing well-trained teachers. The ultimate success of the seminar should be evaluated in terms of how state programs are affected by the activities and discussions of the seminar. The responsibility for implementing new ideas and programs will rest with the participants.

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SECOND ANNUAL NATIONAL VOCATIONAL-TECHNICAL TEACHER EDUCATION SEMINAR

PROCEEDINGS

PURPOSES AND OBJECTIVES OF THE SEMINAR

James W. Hensel*

As seminar chairman, my role at this point is to set forth the purposes and objectives of the seminar. Where are we going and for what purpose? What do we want to accomplish through our discussions here this week?

Whenever anyone mentions the importance of having a goal or setting up an objective, I am reminded of one of Alice's adventures in Wonderland.

It seems that Alice was confused and lost as she wandered in the forest. As she looked around for some assistance, she saw a Cheshire cat and began rather timidly, "Cheshire-Puss, would you tell me please which way I ought to go from here?"

"That depends a good deal on where you want to get to." said the Cat.

"I don't much care where---" said Alice.

"Then it doesn't matter which way you go." said the Cat.

"---so long as I get somewhere." Alice added as an explanation.

"Oh, you're sure to do that," said the Cat, "if you only walk long enough."

Alice felt that this could not be denied, so she tried another question. "What sort of people live about here?"

"In that direction," the Cat said, waving its right paw round, "lives a Hatter; and in that direction," waving the other paw, "lives a March Hare. Visit either you like: they're both mad."

"But I don't want to go among mad people." Alice remarked.

"Oh, you can't help that," said the Cat, "we're all mad here. I'm mad. You're mad."

"How do you know I'm mad?" asked Alice.

---

*Dr. James W. Hensel, seminar chairman, The Center for Research and Leadership Development in Vocational and Technical Education, The Ohio State University, Columbus, Ohio.

"You must be," said the Cat, "or you wouldn't have come here."[1]

On behalf of The Center for Vocational and Technical Education, I would like to welcome you to the opening session of the Second Annual National Vocational and Technical Teacher Education Seminar. It is gratifying to see the number of educational leaders assembled in this room tonight. Our pre-registration figures show 210 individuals from 42 states will be attending the seminar.

Last year the first seminar on vocational and technical teacher education focused on a broad spectrum of problems in education and related disciplines. A wide variety of topics were discussed and from these problems, the committee felt that two in particular warranted a great deal more study. Thus, as a direct result of last year's seminar, the two major topics this week will include:

> *Differentiated Staffing*--the development, training and utilization of various levels of professional and semi-professional staff in the total context of occupational education.
>
> *Vocational-Technical Education for the Disadvantaged*--the development and utilization of appropriate materials and teacher education for better occupational education for disadvantaged groups.

To provide depth in these topic areas, The Center assembled two task forces, composed of nationally recognized scholars. The groups met last spring, discussed the ramifications of the topic and provided one member of the task force with an outline for a major paper. The task force members will give their reactions to the seminar speakers and work with you as a resource person in the committees during the week.

The perspective for our examination of the two seminar topics will be provided tonight by a global look at teacher education, government programs and the national picture. Tomorrow morning the professional component of teacher education, particularly as it affects programs in vocational and technical education, will be explored in relation to the major seminar topics.

Unlike Alice in Wonderland, we do have specific goals in mind. The primary objectives of the seminar are to:

1. Develop an awareness and interest in the topics of differentiated staffing and preparing teachers for the disadvantaged.

2. Analyze the results of recent research, experimental programs and new developments as they relate to the seminar topics.

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[1] Lewis Carroll, Alice's Adventures in Wonderland (New York: Airmont Publishing Co., Inc., 1965), p. 66.

3. Explore the most effective and promising approaches to initiating an active program in each state which would implement activities explored during the seminar.

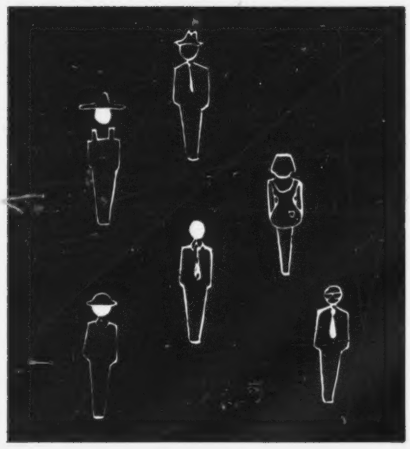
The ultimate objective of the seminar is to encourage a new look at our teacher education programs in vocational and technical education. *We must do more than discuss, analyze and explore*--we must plan to put some of the ideas of the seminar *into action*. With this in mind, you may wish to give special attention to the following questions:

1. What success has been demonstrated in other states--in other programs which might be applicable in your situation?

2. What type of experimentation, research or pilot programs are needed and what is the first step which would be most appropriate for you?

3. What additional seminars, information or coordination are needed for you to build the strongest program in your state?

As stated in the seminar challenge in your program "the ultimate success of the seminar should be evaluated in terms of how state programs are affected by the activities and discussions of the seminar. The responsibility for getting new ideas and programs into action will rest with the participants."



PROFESSIONAL COMPONENT OF VOCATIONAL-TECHNICAL TEACHER EDUCATION

EPDA AND VOCATIONAL EDUCATION

Don Davies*

I am happy to be here for several reasons. One is that the Office of Education's new Bureau of Educational Personnel Development, which I represent, has made a major commitment to the training of personnel for vocational and technical education. You people are an extremely influential group in the field and I welcome the chance to have you as a captive audience. It gives me an opportunity to share with you some of my thinking about where we might be going. I also would welcome the opportunity, of course, to influence you in some measure because of the influence you will have on your own institutions.

I am also pleased to be here because we are about ready to usher in a whole new and exciting era in vocational and technical education. The new Vocational Education Amendments of 1968 provide two new programs of training and development: first, a graduate fellowship program for personnel in the vocational and technical education fields; and second, a program of in-service training for vocational and technical personnel at all levels. This new part is closely parallel to Parts C and D of the Education Professions Development Act, which provide for fellowships and in-service training for personnel in all fields and at all levels in education. I think this additional part of the legislation is extremely important and that it is going to be of special significance to those of you who exercise leadership in teacher education in this field. Begin thinking now, actively and vigorously, about how the new funds--when they are available--can best be used. And advise us in the Office of Education of your thinking, for we are going to have something to do with determining how the funds can best be invested.

I am especially pleased to be here because this seminar is made possible by The Center, and The Center is made possible by Office of Education funds. It is interesting to me to see such a tangible payoff on funds distributed through Office of Education programs. I must say I have been quite impressed in the last three months with both the quantity and quality of planning that has gone into this conference. It is obvious that this meeting has a shape and a plan. Some people have done their homework in advance, and now it is probably largely up to you people as the participants to see what you can make of it.

I was delighted when I saw that the conference topics were differentiated staffing for the schools and the education of disadvantaged youngsters--both happen to be subjects in which I have some special interest--and I am pleased to see leadership in your field paying some special attention to both of these areas.

---

*Dr. Don Davies, associate commissioner for Educational Personnel Development, U. S. Office of Education, Washington, D. C.

A few months back the Saturday Review published a satirical article which strung together a series of clichés that have somehow hung on in the education jargon. The clichés were worked into a strain of "jabberwocky" statements and attributed to non-existent officers of non-existent education organizations. A lengthy bit of this gibberish, for example, was attributed to the executive secretary of something called the Society for Relevant Learning. Now, it seemed to me, as it must have seemed to the editors of the Saturday Review that the article was so obviously satire that it could not possibly be mistaken for anything else. But, strangely enough, the author of the article who happened to work at the Office of Education started to receive a great deal of mail. Applications and inquiries arrived from people all across the country who sought to join the Society for Relevant Learning. The author became deeply pained and upset by all of this, of course. I advised him to take advantage of the opportunity to go into business and see if he could become the Hugh Hefner or Dale Carnegie of the educational world.

The point I am trying to make with this story is that all of us are deeply concerned about the directions in which our country is moving, and those of us who are responsible for education and for managing certain aspects of social change are becoming desperate for what might be called "relevant learning" and for ways to provide more relevant learning for the young people in this country. Now most of us are not so foolish as to think that we can achieve relevant learning for ourselves or for our charges by setting up an association and paying membership dues. Most of us know that if we are, in fact, able to achieve a more relevant learning, it will come about in other ways.

It will come about, I think, through the resourcefulness of all of those who are genuinely distressed by assassinations, by civil disorders, by violence. It will come through the efforts of people who know what the word racism means and are sensitive to all that it implies. It will come out of a growing recognition that we can no longer afford the divisiveness and the debilitation that poverty brings. It will come through the inventiveness of individuals who really yearn to make some difference and to be useful in this world. It will come, I think, through the combined efforts of education leaders such as you. It is not going to be a tidy or comfortable process. It is going to be a very painful one. And we will, in a sense, be paying dues. We are paying right now in the currency of anxiety and stress and confusion. When I say "we," I mean institutions as well as individuals.

We have come to the point now in our society where we are beginning to believe that man finally does have the ability to shape his own destiny and that education has a very important role to play in developing that ability. Some of the social agony we are experiencing can be traced directly to the gap between the high expectations society has for education and what we are usually able to deliver.

In order to change institutions--which is what we are all doing, I suppose, in trying to shape a more responsive and relevant society--we first have to change people. In order to change education, which is an institution, we must first change the people who serve education; and in order to do that we must change ways in which we recruit and train and retrain and utilize and hold onto all of the people who serve education. This, of course, is what the Education Professions Development Act is all about, and this is what my particular job in the Office of Education is all about. This is why I am here tonight. The message is a very simple one, really: that books and buildings and courses of study and textbooks are great, but they do not mean much in changing an institution such as education unless you also change people.

I would like to indicate five or six of the specific directions for change in teacher education which seem to me to be the most important, in the hope that they will be of some use as you attempt to look at teacher education in vocational and technical fields and at the two topics that you have set before you. I am not going to be talking about your field primarily tonight. I am going to be talking about teacher education in all fields, in general, and ask you to make those applications that you feel you would like to make.

First of all, it is clear that we need programs for training personnel, both preservice and in-service, which will make some substantial difference in how these personnel behave, how they act, how they feel, how they teach. If you want to go back to a cliché, you can say, "We need to develop training programs that are relevant because they make some difference to people."

It must be obvious that I am assuming that one of the great weaknesses in teacher education in general in the United States today is that it is too often not relevant to what is going on in schools and classrooms and communities. It is too often not relevant to the clients, either the preservice prospective teachers or in-service teachers.

There are numerous solutions to this problem of irrelevance. Let me suggest just two or three. At the outset, we should focus increasingly on the professional aspects of training. We should focus on the act of teaching itself, on the process of teaching, as the source of content and of subject matter. We should ask our students to study teaching rather than talk to them about it--something we typically do. Think back to introduction-to-education courses that you either took or taught. Primarily, they involve talking about teaching. What I am suggesting is moving the content of professional training for our business so that it focuses on the process of education itself, which is in the classroom or the laboratory or shop with teachers and students. From there--from the teaching act itself--you move to relevant theory and relevant ideas--an inductive rather than a deductive approach.

Next, we are more likely to develop relevant programs for preparing teachers, either preservice or in-service, if we insist that these programs are planned and conducted jointly and collaboratively by schools and colleges. Of course, this is something we have never done. We have always assumed it is the university that produces someone and it is the school system that consumes him. I would suggest that this is a lot of nonsense and that relevant programs are more likely to grow out of collaboration between these two institutions.

Another kind of collaboration which will produce--at least can produce relevance--is collaboration among those people in the university who have something to contribute to the process, the educationist on the one hand and the specialist in the various subject fields, whether they are academic or nonacademic on the other hand. If you put together this mix of the university people in education, the subject-matter specialists and the practitioners from the schools, and give them the responsibility for planning and conducting and evaluating teacher education programs, you are much more likely to get relevant programs than you are in the present arrangement where the university does it unilaterally, primarily for the preservice part, and the schools go their way, often unilaterally, for the in-service part.

Two of the great by-products of getting the schools and colleges together in an important and meaningful way would be that we could finally break down the meaningless barriers between preservice and in-service preparation. The preparation for teaching would become a continuous thing which does not stop when you get a diploma.

We also need to make major revisions in what we call student teaching so that it is no longer a kind of practice experience, but becomes a true internship in the school setting. Enough about relevance and teacher education programs that make some difference.

My second point has to do with the need for training programs which will prepare teachers and administrators and other kinds of personnel to work effectively with young people who are disadvantaged economically and educationally. Teacher education institutions, by and large, simply are not doing an adequate job to prepare and recruit teachers for schools serving low-income families in the ghettos in the big cities and the rural poverty areas of this country. They are not yet responding adequately to the need. One of the reasons they are not is that most educators across the country have a very strong impulse toward the well-scrubbed, the bright, the people who are very much like us in interests and attitudes and backgrounds. We have a very strong impulse toward those youngsters who least need our sophisticated services. What I am suggesting here is that in our training program we need to turn this situation around. Let me suggest some of the characteristics that I think should exist in all training programs for all people who are preparing to teach in schools in this part of the twentieth century in the United States, but most particularly for those people who are going to teach youngsters who are "different." By "different," I mean poor, black, red, brown, physically handicapped--different from most of us.

It seems to me that any training program designed for prospective teachers or in-service teachers or administrators who work with the disadvantaged must make a concerted and effective attack on the attitudes and feelings of those participants. It is not going to be enough to give everybody a course in sociology of the poor. If there is anything that is most important about the problems that poor kids have in our schools, it is the fact that teachers who teach them, the administrators who administrate them, have very low expectations for the learning capacity of these children.

Most of you are now familiar with the Rosenthal study which is just out. This study makes it perfectly clear that one of the most powerful influences on what people learn and achieve in school is what their teachers think they are going to learn and achieve. If a teacher or the administrator thinks the kid cannot make it, then he probably will not. If the teacher and the administrator think he has a chance to make it, he does have a pretty good chance. It is a very simple ideal that I am suggesting here--that every training program for young people or old people who are preparing to teach or who are already teaching should provide a concerted attack on the attitudes and feelings of educational personnel so that we can begin to turn around these attitudes and feelings and make them more positive toward kids who are different. I would suggest that unless we do this almost all of our efforts to improve the education of the disadvantaged will be down the drain. All the money that we are spending on Title One and Title everything else will not amount to very much unless we begin to turn around this attitude of our schools and ourselves.

There is another important part of this attitude that is a training problem. American schools figure that it is the kid's responsibility to learn and if he does not learn it is his fault. When it comes to disadvantaged kids, most of us tend to blame his inability to learn on the fact that the kid is black or that his parents do not subscribe to Life magazine or that he does not have a father at home or that there is something in the community that is dragging him down or the fact that he is poor, or undernourished, or something else. We find excuses in the child and outside of the school. I am suggesting that we will never solve the problems of the disadvantaged youngsters in our educational system until schools and teachers are willing to be accountable for the success of their clients, willing to say that it is our job to make youngsters succeed in our schools, and if the youngster fails we fail.

Training programs for personnel for the disadvantaged should be developed with the advice and participation of people who know something about the disadvantaged. By that I mean people who are themselves disadvantaged. I think it is time we stopped planning and conducting training programs to get young people ready to teach in the ghetto without tuning in to what parents and people in the ghetto communities know and want and feel about teachers. If you read the newspapers these days, you know that people in ghetto communities want to have something to say about the quality of the education their children are receiving. We may not like what they are saying to us, but I think we should listen. As far as developing relevant training programs, it seems to me that all of us who are concerned about the education of disadvantaged children had better listen to what the parents and community are saying.

Further relating to the disadvantaged, it is time we moved the setting for training young people to teach the disadvantaged from the cloistered campus to the school and to the ghetto community itself, whether it is on an Indian reservation or whether it is in Bedford Stuyvesant. It is time to get the training out there where the teaching is going to be done rather than to try to prepare people to teach the disadvantaged in a summer session at Boulder, Colorado.

The third point about teacher education I hope you might find useful is the need to equip educational personnel to deal effectively with technology, with the machine. I cannot imagine an effective program to prepare teachers or an effective in-service program for teachers, regardless of the subject field, that would not address itself to the fact that we have now available in education a vast technology that is largely being misused or under-used. There is no way to get that technology used adequately except by developing positive attitudes on the part of educational personnel and then giving them the skills and understanding they need to utilize it. I am talking about utilizing technology for management purposes in education, and also utilizing it for instructional purposes.

What I am saying grows out of an assumption that most people in education--and I include myself--are really terrified of the machine. We fear the computer taking over, the teaching machine doing our job for us and replacing us, technology sort of drowning out humanism. What we see is basically a person-to-person kind of process, and, despite all the talk about computer-assisted instruction and new technology, by and large most educators remain unconvinced that technology has much to offer. I would look toward training programs for all kinds of educational personnel at all levels that address themselves specifically to this problem: to equip those personnel to live in a society and in an educational system which has at its command a vast technological resource that ought to be utilized for our own purposes.

A fourth point is that we need training programs for educational personnel of all kinds, at all levels, in all fields, which reflect the kinds of approaches and techniques and attitudes which we are trying to teach these personnel. It is time we responded to what our students have been asking us for 150 years--"Isn't it time you practice what you preach?" "Isn't it time that you stop giving us lectures about how to conduct small group instruction?" "Isn't it time that you stop giving us speeches about technology and start using technology in teaching us?" "Isn't it time that you stop talking about individual differences among children and start recognizing the individual differences among the college students you are preparing to teach, and develop teacher education programs which are in fact individualized?" This is a very simple point, but I recognize it is very difficult to carry out. But if we are to accomplish anything, we will do it by demonstrating rather than by telling.

Fifth, we need programs to train educational personnel of all kinds, at all levels, in all fields, which will recognize that jobs in education are changing, and the concept of the self-contained teacher in the self-contained classroom is replaced by a concept of differentiated and flexible utilization of staff--and of course this is one of your central topics in this particular meeting. My point is that programs for training personnel of all kinds should equip these personnel for greater specialization because that is what differentiation means--more specialization. It should equip them to work as a member of a team rather than to work in a self-contained shop or classroom or laboratory. That is the essential difference in the lives of the people who will work in education in the next three and four decades as contrasted to those in the last three and four decades.

A differentiated staff has a very special importance to American education in 1968. If we expect to have any success in moving toward greater professionalism in teaching, in achieving the kinds of competitive salaries that we talk about for people in education, in recruiting and holding the kinds of talented people we all say we want to recruit and hold, in really individualizing instruction in schools across this country--if we are going to have any success at all in doing these things--we simply are going to have to develop a flexible and differentiated way of utilizing personnel to man the schools. Our present characteristic, self-contained view of the classroom and our view of the teacher as being omni-capable, onmi-virtuous has to be replaced by a more flexible and differentiated concept.

By and large, all of us see the teacher as someone who should have the virtues and capacities necessary to administer to all the personal, educational, and physical needs of 30 to 50 elementary school youngsters all day long, or to 125 to 150 to 250 high school youngsters in five or six or seven or eight classes during a high school day. Most of us know that that expectation is unrealistic. The point for teacher educators is to build into the preservice preparation of teachers the kind of training that is necessary to get young people equipped to teach in this kind of a changing educational world. Build into your programs now experiences and knowledge and skill and practice that will get young people ready to work as members of a team of some kind and as specialists rather than all-purpose generals.

There are obviously some differences between elementary education and many of the fields which you represent. I am going to leave to your further dissection this topic in the next two or three days to make applications from the general case for differentiated staffing; that is one of the reasons you are here.

I have just one final point about training programs. This is one I feel very keenly about, and it is one I bring with special feeling to this audience. We need programs of preparation for teachers and administrators and leadership personnel which will break down the barriers that separate the general world of education from the vocational world. People in general education often accuse those in vocational education of living in their own little educational ghetto and enjoying it. I think there is little doubt about the barriers that exist between people in your field and people in general fields. Maybe you do not like to talk about it or hear about it, but those barriers do exist. We all know why they have been created.

On the one hand, they have been created by a kind of genteel snobbism on the part of those of us who are general educators toward those things that are not academic--a kind of general feeling that poetry is pretty good and blueprints really are not, a suspicion that dirty hands and things in which you have to get your hands dirty are not quite as good and respectable as other kinds of activities.

On the other hand, there has been a reverse snobbism applied toward people who are "academic," who cannot meet the vocational payroll, and who themselves do not know how to earn a living in a trade. There is a good deal of suspicion and a good deal of lack of trust, and I have experienced it at every level. I have experienced it in the high school in which I taught; I experienced it in the university in which I taught; I experienced it in the state in which I worked; and I experience it at the national level in education. It exists, but what can you do about it? More than wring your hands and say, "We all ought to get together."

I think there is a good deal you can do about it because you are teacher educators, and if you would like to join me in a kind of ecumenical movement beginning tomorrow or whenever you get back to wherever it is that you are going, you can start first with yourself and secondly with the people that you are responsible for training. You can begin with the girls whom you are preparing in home economics or with men you are preparing in vocational agriculture or with the people in whatever your field is.

In dealing very specifically with this problem of separation between general and vocational education, you can start by trying to make the case, as I often do, that there is an increasing need for the general component in all of vocational education. By that I mean the component which would include communication skills, the skills of human relationships, the general knowledge that people have to have to exist comfortably and successfully in this kind of complicated society. At the same time, there is an increasing need for a vocational component in the general education for all people who are being prepared in one way or another--usually not very well--for the the fact that they are going to earn a living and that work is going to be one very important part of their lives. I think you can do this with your own students--whether they are prospective teachers or whether they are teachers who drive in from someplace to take in-service classes. If you get started on this you could make an enormous contribution to a problem that we all recognize but just do not like to talk about very much.

Let me leave you with just one thought about changing institutions. Our main purpose in the Education Professions Development Act is to try to help the educational community--people in schools, colleges, and state departments--bring about lasting changes in the ways in which they recruit, train, and retrain educational personnel of all kinds. Our aim is to try to invest our funds so that schools and colleges can change in the directions that they want to change--some of the ways that I have been suggesting here tonight. Our aim is really institutional change; and it is that because I am terribly concerned, as I guess most of you are, and most of those people who wrote to try to join the Society for Relevant Learning were, about the state of all of our institutions and most particularly about those of which we are a part.

John Gardner, the former Secretary of Health, Education, and Welfare, has some very perceptive things to say about the state of institutions in our society. Last summer he gave a commencement speech in which he looked back at the twentieth century and its institutions through the eyes of a twenty-third century scholar. In doing so, he made some particularly astute observations. What he said basically is this: that the institutions of the twentieth century, including education, were caught in a savage cross-fire between uncritical lovers on the one hand and unloving critics on the other. On the one side were those who loved their institutions and who tended to smother them in an embrace of death, loving their rigidities more than their promise, and shielding them from life-giving criticism. On the other hand, stood a breed of critics without love who were skilled in demolition but untutored in the ways by which human institutions are nurtured and strengthened and made to flourish. Caught between these two forces, the uncritical lovers on the one hand and unloving critics on the other, the institutions of the twentieth century perished. It seems to me that we have an obligation as leaders in education and as leaders in teacher education to do what we can to keep that prophesy from coming true. I think we can, and I think we must.

It is good being with you this evening and I am grateful to have been billed as the keynote speaker. That gives one all sorts of latitude and the opportunity to speak at some length on a subject of his own choosing. Actually, I think I've heard only one good keynote address in my entire life. It was given by the mayor of Washington, D. C. about a year ago. He had called in a group of experts from all over the country to assist in developing plans for Washington's long-disucssed subway system. That is a subject that has been talked to death in the District. The mayor got up and said, "Ladies and Gentlemen, I am here to give the keynote speech about our new subway system and this is it: 'Stop talking and start digging.'"

That, in essence, is my message, too. It is time to stop talking and start digging.

VOCATIONAL TEACHER EDUCATION: CONCERNS, CONCEPTS AND COMMITMENTS

Robert E. Taylor*

In my talk this morning, I would like to provide a backdrop or general context in which you might consider the priorities identified for this seminar. Hopefully my remarks will stimulate your thinking to go beyond the general concerns I mention.

Recognizing the projected expansion of vocational and technical education, no aspect of our program has greater urgency nor in my judgment will have more long-term effect than the improvement and redirection of programs of teacher education. It should be equally obvious that new types of instructional, supporting, and leadership personnel are needed. Our problems will not be solved with "more of the same." If ever in the history of vocational and technical education a group met with a real purpose and for compelling reasons, it is this group assembled here. We are confronted with an olympian task.

Why the urgency for our efforts? In the broad context, Professor Philip Hauser, chairman, Department of Sociology, The University of Chicago, analyzes our situation in what he calls the social morphological revolution--the changing requirements within our society. Its four elements according to Hauser are: 1) the population explosion, 2) the population implosion that has made for densely populated central cities, 3) the mixing of diverse population groups, and 4) the accelerated tempo of technological and social change.

Various minorities, interest groups and society itself are all crying out for fundamental change, for immediate improvement; and they are looking to education in general and vocational and technical education in particular for results--results, not excuses or explanations. They have been patient, but they will be persistent in their expectations of us.

It is increasingly clear that education is becoming recognized as an effective instrument of national policy. It is being viewed by some as the prime vehicle for economic growth and national well being. Currently, national governments (ours included) are considering educational programs in revolutionary terms. They now realize that education is the responsible link between social needs and social improvements. Predictably, education will be called upon more frequently to contribute in a major way to the solution and amelioration of complex social and economic problems. There is, I believe, a new sense of urgency in our efforts and perhaps an almost frightening and blind faith in the "powers of education" that some view as a panacea for all social ills.

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We currently are a part of an educational revolution, a revolution which promises to parallel and exceed the impact of the agricultural and industrial revolutions of earlier decades. Further, there appears to be a national readiness in education and society to support experimentation and innovation. It is a time for bold creative thinking and action. Superficial thinking or "tinkering with the mechanism" will not suffice. Fundamental thinking and improvements are required. As George Bernard Shaw once said, "Some see things as they are and ask why. I see things as they never were and ask why not."

It would also seem reasonable to expect that with increasing financial investment and rising expectations that there will be more concern for fiscal and educational accountability; evaluation, if you please. In this regard there are new ways of viewing things. There is afield in our country a new recognition that human resources are the true resources of the nation. Therefore, they are being viewed as an economic resource. The treatment of education and training as forms of investment--investments in human capital--is a fairly new feature of economic thinking which is proving to be a useful one, one that will predictably play an increasingly prominent role in policy and program development. It is evident that cost benefit and systems analysis, and program and budgeting systems will be increasingly applicable to education, to vocational and technical education, and to the heretofore sacrosanct area of teacher education which has previously escaped such intense assessment. It will no longer suffice to ask, is what we are doing good, is it of some value, but rather is it the best possible use of resources in light of alternative needs and investments? Are there other procedures and techniques that would more efficiently and effectively yield the same returns? Gain the same learning? Further, we must not limit our evaluation of vocational teacher education to what we presently have, but we must also make assessments in relation to what we do not have but is needed. We must evaluate not only in terms of our objectives, but we also must question our objectives. We must be concerned with both educational and economic efficiencies.

In this connection, how do we expect "professionally" prepared teachers to differ in their performance and behavior from those who have not had the benefit of the professional sequence? Assuming we can identify these expectations, can we demonstrate the differences? Can we establish evaluation and accreditation procedures that will not "lock us in" but will foster rather than inhibit self-renewal?

Currently the climate for education and vocational and technical education is unexcelled. Other areas of educational endeavor also have been given additional attention. As commissioner of education, Howe recently noted there is virtually no federal education legislation of any consequence that has not either originated or undergone major improvements within the last five years. The new amendments to the vocational education act have been approved before we have adequately fulfilled the expectations of the 1963 act. These amendments provide unprecedented opportunities for all areas of vocational and technical education and especially for teacher education. Typically, we have thought of teacher education and similar leadership development programs as "leading the pack." However, in this connection, I am reminded of the famous quote of the late C. F. "Boss" Kettering, director of research for GMC about the second law of aerodynamics, which loosely stated indicates that, "You cannot push on something that is moving faster than you are." Is vocational teacher education sufficiently progressive, innovative, and advanced in its thinking that it is truly providing direction and leadership? Or, is the observation and analysis of Seymour Metzner in the October, 1968 Phi Delta Kappan, on general teacher education applicable? After analyzing a series of studies dealing with teacher knowledge, with degrees held by teachers, time spent in training, recency of training, in-service training, and related factors, he concluded that there is not a single study that, after equating for pupil intelligence and socioeconomic status, has found the length of the teacher preparation variable to be even peripherally related to pupil gain, let alone being of major importance in this educational outcome.

If true, this should jar our very foundations and hopefully cause us to assess some of our heretofore unexamined assumptions. In our discussions here this week I trust that we will focus more strongly on the qualitative aspects of teacher education rather than the quantitative aspects. Can we identify the critical behaviors our teachers need to cope with present and emerging conditions?

Why this annual seminar on Vocational-Technical Teacher Education and more specifically, why the particular focus? As we examine major change strategies used in education, we see the pivotal nature of teacher education. For example, we can try to secure change by the development of curricular materials, by administrative fiat, various uses of legislative power and coercive measures. We can and have set up special financial incentives and inducements to encourage teachers and schools to move in desired predetermined directions. Empirical evidence has been used to demonstrate the relative advantage of new directions and programs. We have used as another fundamental change strategy the education and reeducation of teachers. Reason seems to dictate that the latter is the most viable since it is basic to all the other strategies and therefore seems to provide the greatest potential leverage on initiating and establishing new programs and improving existing ones.

We recognize the pivotal and crucial nature of the professional sequence not only in the preparation of teachers, but in the initial preparation of leaders in vocational and technical education, because it is through the professional sequence that most of our administrative and other leadership types evolve. Therefore, it seems appropriate that we devote some attention to the general context in which the professional sequence functions before addressing the two specific problems of this seminar.

As an aside we are forced to note that there appears to be little, if any, fundamental changes in the professional sequence of teacher education. Examining the classical sequence in teachers' colleges from 1905 to the 60's, we see little deviation from the classical sequence of history of education, student teaching, psychology, etc. Thinking in terms of current educational trends, for example, consider the individualization of instruction. Do we have any way presently to individualize the program of vocational and technical teacher preparation or do all of your prospective teachers go through the same sequence irrespective of their past experiences, learning and development rates, and professional goals?

As we observe the current scene we conclude that except for a few oases it is a fairly arid land devoid of major innovation and at this point with no clear-cut promise of self-renewal. For example, have we adequately taken into account the potential role of modern technology? Are we even using equipment, facilities and practices that are current with local schools? Recognizing the advancements and enrichments that have taken place in local schools as a result of Title III and other major thrusts, have our college- and university-based teacher education programs kept pace?

We have witnessed considerable emphasis on and progress in, developing self-directed learners who assume major responsibility for their own learning. Have we stressed this in our programs of teacher education? Or, have we merely indoctrinated them with our best current practices? Have we given future teachers experience in using "professional learning tools" to enable them as professional teachers to keep abreast of developments and to continue to grow professionally through independent self-directed learning.

John Fischer, president of Teachers College, Columbia University, has said, that "modern technology has been producing potential teaching tools faster than teachers have learned to use them." As a consequence, schools are far less efficient than they could be, if teachers were properly prepared to use even the simpler devices already available. Teacher education will have to respond to the fast-breaking technological developments in communication media, and in machines for storing and retrieving information.

I can still remember with great vividness the penetrating question that Lou Bright, formerly associate commissioner, Bureau of Research in the U. S. Office of Education, asked in relation to some Center projects in teacher education and guidance. His fundamental question was, "Are you sure that these activities could not be more adequately handled by a machine?" He was not suggesting that machines replace teachers or guidance workers, but he was pressing the argument, "are there not differentiated and specialized tasks that could well be mechanized." The same question applies to the preparation of professional personnel in these areas.

While we must be wary of dangers of overgeneralization, it would appear that we at least have reasonable bases for scrutinizing the degree to which teacher education has kept pace, and recognizing its pivotal role, actually led in the development of new programs. However, in fairness, I think we must recognize that teacher educators are not completely responsible for present policies and conditions.

In a recent survey of 508 colleges and universities belonging to the American Association of Colleges for Teacher Education completed by Stiles and Carver, some rather revealing factors concerning policy for teacher education were revealed. Perhaps the sweeping conclusion is that the oft-made charge that professors of education are in exclusive control of teacher education was not supported by the survey. In only one out of five institutions was it the case. Furthermore, it is doubtful that this minority group of institutions represents a hard core of resistance to the inner-disciplinary approach to policy making. Rather, institutions in this category appear to be only slower to change than others. It would appear then that liberal arts professors and other academicians share with teacher-educators the responsibility for resistance to change in the professional area.

As the late Dean Kimball Wiles pointed out, "in the present preparation of secondary teachers, at least 75 percent of the course work is outside the department or college of education. To expect the education of the teacher to be the outcome of the 25 percent of the student's work taken in the department or college of education is unreasonable. Unless there is planning with all of the departments participating in the preparation of the teachers, the programs will not be the ones we need and will not effectively exploit the total resources of the institution."

While these statements relating to general teacher education are, in the main, applicable to our area, I think we must also recognize that there are unique forces and factors impinging on policy and decision-making in vocational teacher education. For example, Vocational Education Bulletin No. 1 of the U. S. Office of Education indicates that the State plan shall describe the State Board's plan for the development of teacher training programs with information on the types of expenditures and the types of teacher education programs to be included and the standards and requirements designed to develop and maintain programs of such character and efficiency as are needed to provide an adequate supply of qualified teachers and other personnel. State directors, supervisors and other personnel exert considerable influence on policies and developments in vocational teacher education.

While we recognize that teacher educators are not completely responsible for policy-making, we nevertheless must conclude that they need to provide the initial leadership needed to secure policy decisions which facilitate innovation and advancement in teacher preparation. We must involve this broad community of interests. We need to make a truly comprehensive systems analysis of the various intervening forces, interests, and groups that interrelate with this complex phenomenon of teacher preparation. We must devise ways that will permit the total resources of the institution and the community to be more effectively deployed. Interrelationships with relevant groups must be established from initial policy-making through program development, execution and evaluation.

While our concerns here this week are much narrower and more sharply focused, we, nevertheless, must keep in mind the contextual setting, the complex system within which our specific seminar objectives must be viewed. We must, as Dwight Allen indicates in his paper, be willing to consider remodeling the total system if we are to effect major change and improvement through the installation of specific innovations.

There are a variety of problems to which we could, and some would argue should, address ourselves to this week--the matter of improving the professional competence of teachers; their technical occupational skills; problems of accreditation and certification; problems of selection, recruitment, and placement; in-service education, the relationship to general education and other areas of education and to inter-service programs. In addition, we are concerned with trying to make future teachers more intelligent consumers of R & D products; that we are trying to establish a more effective interface with community and employer groups; that we are trying to secure more active involvement and commitment in the preparation of teachers from local school districts; and that we are trying to make them active participants rather than passive cooperators. All of these problem areas merit individual seminars; however, the planners of this Second Annual National Seminar believe that the two problem areas meriting the greatest amount of attention and promising the greatest potential yield for improvement were those of differentiated staffing patterns and preparing teachers for the disadvantaged. Both of these viable yet interrelated topics seem to strike at the fundamental problem of whether we can break the lock-step of the "single model teacher."

Far too long we have conceived teacher-education as preparing a single model for the classroom, laboratories, or shops. We are now moving into an era of differentiation of roles in vocational education which calls for people with a variety of competencies working in a variety of teaching-learning situations. The differentiated staffing approach recognizes the different levels of professional responsibility. Are we at the point where we need to prepare several different types or models of teachers in agriculture, business and office, distributive education, home economics, etc.?

With particular reference to the disadvantaged, until a few years ago our national programs to help the needy, the disadvantaged, and the unemployed, those who had missed out on the promise of America, focused chiefly on providing them with financial support of one kind or another. Work programs, welfare programs and social security programs helped insure survival for those who had no basis for support or they were absorbed in menial labor with low rewards. In those years the great national need was for programs that would, on the one hand, promote better economic growth and stability for the nation, and, on the other, provide the basic economic necessities for the millions of individual Americans who lacked the ability to attain them.

While we still need these economic programs, we still must meet the more immediate needs of the disadvantaged in America. We have now reached a point in our national history at which we no longer must rely upon economic measures alone. We have within our grasp the instruments by which the individual can take charge of his own destiny and by which poverty and deprivation can ultimately be eliminated. Through education we can help each person achieve the capacity to adapt to changing jobs in a changing economy and a changing world. The under-educated person has limited opportunity. This, then, is the great challenge facing vocational and technical educators. To perfect and offer programs that will enable the disadvantaged to prepare themselves for career oriented opportunities. To enable them to become economically self-sufficient and effective members of society.

The current emphasis on the disadvantaged is motivated by more than our philosophical orientation or a new enlightened social conscience. It is also motivated by the sheer economics underlying the tremendous waste of human resources--the significant numbers that are not developing their potential capacities. Consideration of alternative costs makes education the most desirable option. Another motivation for focusing on the problems of teaching the disadvantaged is that if we can make major advancements in unlocking the keys to these complex teaching-learning situations (the hard to reach and the difficult to teach), then we should have new insights and applications to the general student population.

In the national scheme of things, it appears that there will be not only increased professional approbation, but the gratitude and appreciation of an entire society to those individuals whose works provide some major advancements on the problem of helping the disadvantaged enjoy the benefits of our scientific advancements and true promise of America. We in vocational and technical education and all education have too long skirted the issue--remained preoccupied with maintaining our present programs. We have not committed sufficient personnel and resources to attacking the problem. True, we run the risk of failing with some attempts but the greater risk is not to try.

In essence, the rationale for the foci of our seminar here this week grows out of our current social pressures to alleviate the problems of the disadvantaged, to make more effective use of our human resources, and to more efficiently deploy our material resources. It also recognizes the potential leverage, impact and yield from concentrating on the problems of teacher education as a change strategy.

I hope that, as we move into the specific discussions on differentiated staffing and preparing teachers for the disadvantaged, that we can relate these specific problem areas to the broader context of the system in which teacher education functions and evolve effective strategies for implementing significant improvements in our two focal areas. In our discussions, let us look at the "wholeness" of vocational and technical education. Let us look at commonalities in vocational education rather than stressing difference and uniqueness. In this connection, I am sure you will be interested in an effort at The Center to identify the common elements of vocational teacher education. This is known in-house as our "Common and Unique Elements of Vocational and Technical Teacher Education" project.

Fundamental and abiding problems in vocational and technical teacher education on most campuses have been duplicative course offerings and narrow compartmentalized experiences. This is especially true in such courses as history and philosophy of vocational education, instructional methods, program supervision, and management of service areas. However, when we critically examine these professional courses, the commonality of much of the content is obvious. Unique instructional concepts and applications are also recognizable and appropriate for teachers in specific service areas. However, the potential advantage of improving cost effectiveness through minimizing duplication and perhaps more importantly the long-range advantages of shared experiences and a common philosophy and experiential base for all vocational teachers is evident.

The Center project on "The Common and Unique Elements of Vocational-Technical Teacher Education" being conducted by Cotrell and Miller, analyzes the professional area (pedagogy) of vocational teacher education to determine which teacher skills, knowledges and attitudes are commonly (or uniquely) needed by teachers in the various vocational service areas.

This project has the following purposes:

1. To determine the core of common experiences and related knowledge needed by vocational-techncial teachers.

2. To develop behavioral objectives for the various skills and performances utilized by all vocational teachers.

3. To develop a model vocational-technical teacher education curriculum which encompasses both a core of common experiences and specialized experiences to meet the training needs of teachers in all vocational service areas.

Project methodology--To accomplish the purposes of the project, the professional functions of vocational-technical teaching were analyzed. In this analysis, 237 performance elements were identified and classified into the following eight categories:

1. Instruction

    a. Planning
    b. Execution
    c. Evaluation

2. Guidance

3. Management

4. Public and Human Relations

5. General School Activities

6. Professional Role

7. Student Organizations

8. Coordination

This analysis was completed through introspection and interview techniques. After performance elements were identified, the associated knowledge units essential to the performance of each skill element were identified.

To determine which performance elements were common or unique to teaching in the various service areas, a force composed of master teachers, teacher educators and state supervisors was assembled to rate these elements. This group rated the performance elements in terms of their importance to both beginning and experienced teachers at both the high school and post-high school levels for each service area. An analysis of these ratings revealed the common and unique performance elements of vocational-technical teaching.

For further validation of this analysis, critical incidents were gathered from a national sample of vocational and technical teachers. These critical incidents were analyzed to reveal the presence or absence of appropriate performance elements. These were then compared to the priority ratings of performance elements made by the task force.

General behavioral objectives were developed for each of the 237 performance elements. From the identification and clustering of performance elements and their associated knowledge units, and the use of behavioral objectives related to appropriate performance elements, curriculum models for the training of vocational and technical teachers will be constructed. These models will be pilot tested on several major university campuses within the next several years.

We anticipate that this project will provide more realistic programs of teacher preparation with improved cost effectiveness. Further, the identification of skills, knowledges, and competencies appropriate for programs which prepare support personnel in a differentiated staffing pattern will be available. A model will have been tested for analyzing a professional level occupation. We anticipate that the first publication on this project will be available early in 1969 and that a pilot program implementing the concepts of the projects will begin in the fall of 1969.

While it may seem premature at this early point in the seminar to begin emphasizing things to be accomplished when you return home, I nevertheless would like to stress some possibilities. First, I would like for you to give urgent attention to replicating this seminar in your own state, involving not only the personnel in vocational-teacher education, but also general teacher education, state department and other relevant groups. Develop action plans for doing something about these fundamental concerns. Second, I would ask you to begin thinking about the topic or theme for next year's national seminar. We will ask for your suggestions on the seminar evaluation sheet during the final session. Additional letters and reflections after your return home will also be appreciated. Third, we would certainly welcome your suggestions as to research and development priorities that are needed to help you and all of us move ahead in these critical areas. We trust that you will keep us posted on new procedures and techniques that you are implementing.

In summary it appears that we are confronted with a monumental task. Granted, the task is complex, but it is not insurmountable. Assuredly, it will be frustrating as we cope with the difficult and complex problems of providing leadership in these critical areas but it is also a challenging time and a good time to be in teacher education and vocational education. To borrow the words of Emerson in his Time for Greatness,

> If there is any time one would desire to be born in is it not the period of revolution when the old and the new stand side by side; when the energies of all men are searched by fear and by hope; when the historic glories of the past are compensated by the rich possibilities of the new era; this time like all times is a good one if we but know what to do with it.

I believe we have the necessary intellectual and physical resources, the necessary commitment to accomplish our mission and keep faith with those we serve. We are poised on the threshold of a golden age in vocational-technical education, if we but know what to do with it, if we but fulfill our leadership responsibilities.

A CHALLENGE FOR ACTION

Rupert Evans*

Why did you come here? The program says you came here to talk about three things: differentiated staffing, vocational and technical education for the disadvantaged, and better ways of educating teachers. If you ask yourself at this point, "Did I come here to find out how to do it in each of these three areas?", the chances are you would say, "Yes." And if you ask yourself at this point, "Did I find out how to do it in each of these three areas?", the chances are the answer is, "No." In some ways this has been a big sensitivity training program--a sensitization to some of the problems that exist in each of these three areas, and there are plenty of problems here about which we should be sensitized.

What are some of the things you have become sensitive to? I would judge, from the panel reports and discussions with some of you, that you have found that differentiated staffing is not just a teacher education problem, but it is also a career ladder development problem; it is a recruitment problem; it is a utilization problem--and it may appear that all of these things have to be solved simultaneously before anything could happen. This rather bothered me as I listened to the panel reports on differentiated staffing. It almost seemed as if people were saying, "Well, we have become sensitive to some of the problems, and being sensitive to them makes it look as if differentiated staffing is a lot tougher to do anything about than we had thought originally. So we are sitting back waiting for somebody to come up with complete answers. Then and only then are we going to be ready to move." Later I will offer some suggestions of ways in which we can move now. They may not be at all saleable, but I have some suggestions anyway.

On the second theme--education of the disadvantaged--I think most of us thought we were more sensitive to this when we came here than we were sensitive to the problems of differentiated staffing. We knew, I think, in advance of this meeting that there are many different kinds of disadvantaged, and that is a step forward. Most of the general public and a lot of teachers--and sometimes even we in our discussions--talk about the disadvantaged as if they were "a class," though we know there are almost as many different classes as there are people. We found out here that nobody seems to have a model program for working with any of the disadvantaged groups. I hope that you learned here, if you did not know before, that most of us do not talk the same language as most of the disadvantaged, and equally as bad is the fact we do not share the same value systems and very often do not recognize that we do not share the same value systems. I think the discussions indicated clearly that you became more and more sensitive to some of the problems involved in working with these individuals, and there were actually some suggestions for operational programs. I have another suggestion that I will throw out later on and we will see if it is acceptable to you.

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On the third theme, it seems to me that you found again that nobody has a model for teacher education for vocational and technical education. I wish we had one in Illinois--we are surely working on it. I know lots of you are working on it, too, but I do not think we have found it yet. I think we have become more sensitive here to some of the problems we face.

I cannot help contrasting a meeting of this type to those held in the "good old days." Some of you are not old enough to remember the good old days in vocational and technical education when we had regional conferences starring somebody from the U. S. Office of Education. This person would tell us about the tried and true philosophy of vocational education. (Of course, they would tell it to us in segregated groups, so the tried and true philosophy for agricultural education turned out not to be quite different from the tried and true philosophy of home economics or trade and industrial education, and so on.) This tried and true philosophy came down, engraved in stone, right off the mountain top in 1917 and, by George, it had not changed and never would change. Those of us who had drifted from the paths of righteousness were chastised in these meetings, and there was a flavor of "Give Me That Old Time Religion." How comfortable it all was. Things seem to be different today. We have panels, councils, economists, and sociologists telling us that we have to change; Congress tells us to mend our ways. But the saving grace to this is that while the panels and the councils and the Congress chastise us, they also give us more money to enable us to mend our ways, and so this helps to temper the criticism. But are we in for a rough time sometime in the future.

The American public and the Congress are on an education jag. They are convinced that education, if it is conducted properly, is going to solve all our problems, and that vocational education, in particular, is going to solve almost all of our problems. Vocational education is going to solve all of our problems of motivation, it is going to solve all our problems of remedial reading, all of our problems of unemployment and of underemployment. It is going to end all of our riots and our protests. One of these days the nation is going to sleep off this education jag and then we are going to have some real problems. They are going to stop believing in vocational education and education in general as a solution to all of our problems, and you can predict that the pendulum will probably swing so far that they will believe that vocational education and education in general are not going to solve any of our problems. In some ways, this is what we had in the good old days. I can remember a time when we operated with $50 million of federal funds per year. (It is only five times that now, and due to go up another five times.) You did not have all the money you wanted to spend, but all you had to do to get that $50 million from Congress was to line up the FFA boys and have them parade in front of the Congressmen. You would say to Congress, "This is vocational education; this is wonderful.", and Congress would vote our $50 million and we could relax for another year.

Well, those were the good old days, but there is no use crying for those comfortable good old days. They are gone, and as far as I am concerned I am glad, because instead of being the good old days they were the hide-bound, stifling, moss-backed old days, and they drove many, many good men and women out of vocational education. As nearly as I can tell only two good ideas were produced between 1917 and 1963: the development of the part-time cooperative program in the South and Prosser's idea that we ought to do something for the forgotten 60 percent of the kids in our schools. Both of these ideas, for 25 years after they were introduced, were fought tooth and toenail by everybody in power in vocational education. Those were not the good old days!

I like the exciting days of today even though I may get fired and you may get fired when this education jag wears off. But when we are talking about the excitement of today, it bothers me that it seems to be occurring almost every place in vocational education except in teacher education. Look at the two big innovations that were recommended by the 1963 panel of consultants: one of them was to minimize the amount of separation amont the various fields of vocational education. Secondly, they recommended that we start serving the needs of youth, and especially start serving the needs of youths who had special needs. As I look at the results of these two recommendations, it appears that it has been local schools that have led the way in innovation, and these have been followed somewhat reluctantly by the state departments and by the U. S. Office of Education, and last to do anything about any of these has been teacher education. Now if I am wrong, tell me so. But I do not think I am wrong. I think the innovation has come first at the local level and that teacher education is dragging at the rear. If you ask yourself which one part of vocational and technical education has done little to minimize the separation among the special groups in vocational education, and which one part of vocational and technical education has done little about serving youth who have special needs, I think the answer in each case has to be teacher education.

Now I have finished telling us how bad we all are. Pessimism is a note, and especially for a last speaker of the program. Moreover, breast-beating really does not get us very far. It is a necessary but not sufficient condition for change. Goodness knows, the last thing I want you to do is to go out of here saying, "It is hopeless; I will just go home and keep on doing the same old thing I have always been doing because I cannot see my way clear to do anything else."

I heard a conservative the other day talk about the old Chinese proverb that "a journey of a thousand miles begins with a single step." He said, "Yes, but suppose you take that first step in the wrong direction." I would much prefer for you to take the step in the wrong direction and break those roots loose. Even if the first step is in the wrong direction, you will end far ahead of those who stay immobile. So I have two suggestions that I would like to add to the suggestions that you received from your panel members--and you received some good ones.

Here are my two modest suggestions. They both stem from this conviction of mine that most innovations, good and bad, stem from the operating level. (Sometimes the operating level does not see the difference between a good innovation and a bad innovation.) My second conviction is that teacher education becomes more and more sterile the further and further away it gets from actual vocational-technical teaching.

The first suggestion has to do with differentiated staffing. I am as convinced as Dwight Allen is that there is a need for differentiated staffing, but he bothers me with what seems to be some rather glib assumptions about the availability of performance criteria, which I have not seen. It bothers me also that he assumes that it is easier to set up performance criteria in vocational and technical education than it is in the humanities. I do not believe it. I know it looks superficially easier, but if we are talking about the whole of vocational education and evaluating what it is that we are attempting to do, then I think it is every bit as tough and maybe tougher than it is in many humanities courses. Moreover, he bothers me when he seems to infer that in vocational and technical education a class of 100 students is as good as a smaller class. Really, the only tight evidence we have on the relationship of class size to performance by the students comes out of the BSCS biology program, and this indicates that 30 students in a class is the break-point in a laboratory course. If you get over 30 students in a laboratory course the student's achievement is going to suffer. A great deal of instruction that we give--rightly or wrongly--and I think rightly, is in a laboratory setting. So, I just do not see these classes of 100.

General Motors is not the world's greatest philanthropic organization. If you look at the class size that they are using in the training of auto mechanics, you will find that they believe one teacher for each six students is about right. But over and above the one teacher who is meeting with the six students, you will find differentiated staffing that adds to the ratio of teachers per student.

My suggestion is relatively a simple one, and that is to find a school nearby that is willing to try new patterns of differentiated staffing, and to try one or more of the following four relatively simple things to start out with in working with that school.

As nearly as I can tell, the lowest level of differentiated staffing (probably not the least effective level of differentiated staffing) is one student teaching another student--an advanced student teaching a less-advanced student. We have seen this in operation, you have all used it in your teaching, and we know very little about how it works and how we can make it work better. Why do not you try some experimenting on this, working with actual students doing teaching?

Secondly, under this first suggestion, for years in vocational and technical education we have used specialists from the community, usually teaching in the adult program. Usually we have not had a master teacher in charge, so there have been examples of attempts by local schools to set up a master teacher or supervisor to work with these community specialists that you bring in. Why not do some experimentation on the effectiveness of such a master teacher? What changes occur when you have this kind of differentiated staffing? You know, these suggestions I am giving you are modest ones--they do not require that you change the entire career ladder; they do not require that you change the entire pay structure. I am trying to give you something that starts you moving one step on that journey.

The third part of this first suggestion arises because we cannot communicate with most minority group members, and those of you here who are black cannot communicate much better than those of us who are white because we are all middle class. Our values and our language are too different for effective communication. What I am suggesting is that maybe we ought to do some experimenting with the use of a model, a combination interpreter and model, in the teaching process. I will tell you what I mean by this. We have a program at our institution that has brought in some 600 black students who normally would not attend a university. We are getting educated, and some of our black professors are getting educated, too. Among other things, our college has set up seven seminars where some 90 of these students get together with a few white students--the ones who were most adventuresome--and we quickly found that the white professors were not getting through to the black students. We then found some black, upward mobile students who were moving rapidly up the ladder from the ghetto. It was clear to everybody that these youngsters are on the road to having it made, and yet they are not so far away from their ghetto background that they cannot communicate. We put one of these models in a key teaching role in each seminar and immediately the seminar atmosphere changed. We have been moving and moving fast since then. I think the reason that our program works is that we have a combination model and interpreter in the classroom. Now, there is no reason this cannot be done at the local level, in the secondary school, and in the post-secondary school. I do not believe our theoreticians would have come up with this solution if they had not been faced with a practical problem with which we had to cope. (This is one of the reasons why most innovations come at the operating level.)

The fourth and last part of this first suggestion is that you find a community college nearby that will set up a teacher aide program and is willing for you to work with them so that you make sure that we do not fall into the trap that we had gotton into notably in the health professions. That trap is that anybody who starts out at a low level and wants to progress has to go back to "go" and start over again in order to get out of the tight little box he is in. Make sure, even though it sticks in your craw, that all of the content of the teacher aide program in the community college transfers to your four-year program. Make sure these young people are not penalized if they want to go on after they have worked and succeeded as teacher aides--and have learned a lot more than you will ever learn about certain types of teaching.

Allow them to come right on to become full-fledged teachers if they have what it takes. Some of your deans may jump up and down, but everytime the dean jumps up, stick a block under him, and when he comes down he is going to be on a little higher level.

To repeat, when you go about breaking into differentiated staffing, do everything you can to make sure that we do not end up with insulated, isolated blocks of jobs that do not form a career ladder. Make sure that somebody who starts at the bottom (and I think the first stage is one student helping another student to learn) can move right on up that ladder to the top of the educational profession without having to go back to "go." And above all, do not look at the problems of differentiated staffing as something so big, so complex, so tough, that there is no place to start. If you could start on even a small part of this problem, we will get something going.

One thing bothers me a great deal. In the reports of your discussions of differentiated staffing and teacher education in vocational-technical education, I did not hear a word about differentiated staffing in teacher education. All I heard about is differentiated staffing for somebody else. I would point out to you that in teacher education and higher education generally we have done far more with differentiated staffing than has been done in the elementary and secondary schools. Unfortunately, we have not done much about making it effective. Rather, we have been forced into it for a variety of reasons. We all have secretaries, clerks, teachers, teaching assistants, and research assistants, though we do not have the differentiation in role between the full professor and the assistant professor which exists in Europe. At the University of Illinois, our College of Education has added still another type of differentiated staffing to the non-academic and academic career ladders that we have built up. We have what we call educational specialists. There are four levels of these specialists, corresponding in minimum pay to instructor, assistant professor, associate professor, and full professor, but the requirements are considerably different. We use these positions as a means of attracting the expertise that we need in order to run a good program without getting tied up with the old question, "But is he a good scholar?" If any of you are interested in our variation of differentiated staffing in higher education, I would like to talk to you.

Suggestion number two has to do with student teaching in teacher education for disadvantaged youth. It is a model based on the part-time cooperative education program. You may say, after I have explained it, that you already have this in your student teaching program. But I do not believe it. The part-time cooperative program assumes that the practitioner on the job knows more about the skills to be taught than does the coordinator of the part-time cooperative program. In the part-time cooperative program, it is the task of the coordinator to make sure that the student is not exploited--that indeed he is receiving genuine education on the job. And it is the further job of the coordinator to make sure that the school program is closely related, at least in part, with what the student is learning on the job.

In my model of student teaching, the teacher in the ghetto school is assumed to know more about the task of teaching there than the supervising teacher who comes out of the university to supervise the student teachers. I think most student teacher programs operate in reverse. They assume that the professor who comes out of the university, who may not have taught youngsters for 25 years, knows more about the tasks of teaching in a ghetto school, even though he may have done no more than walk through it with his nose pinched closed. We assume that this supervisor of student teachers knows more about the task of teaching in a ghetto school than do the better teachers who are teaching there. I do not believe it. Remember, in both the part-time cooperative program and in this model that I am proposing, we are not talking about any and all practitioners. In the part-time cooperative program we look for first-rate practitioners on the job. In this model of student teaching, we should look for first-rate teachers in the ghetto to do the supervising of these student teachers. The person who comes out of the university would have a different job. His job, like that of the coordinator in the part-time cooperative program, is twofold. First, it is to make sure that the student is getting a genuine educational experience and is not being exploited; but the second part of his job is even more important: to make sure that what is taught in that institution of higher education bears some relationship to what is going on as the student learns on the job. We might even end up with some individualized instruction in which part-time cooperative coordinators are pretty skillful, but in which we in teacher education are not. As nearly as I can tell we assume that all students who are preparing to teach a particular subject ought to be treated exactly alike, regardless of where they are going to teach it, regardless of what their backgrounds are. So my suggestion number two is a very simple one: that you experiment with a part-time cooperative model of student teaching. I think you are better equipped to do it than any other group in teacher education, though I think it has applicability for all types of student teaching--not just for vocational-technical. But you are the logical people to start it. You will certainly have no difficulty in finding ghetto schools, rural or urban, which would welcome the opportunity to participate in this type of arrangement.

If you really want to make sure this program is outstanding (I will get in a plug for the University of Illinois), follow it up with a course for first-year teachers. Our agricultural education staff has a beauty. If every teacher who is on the job for the first year is closely in contact with the university program that produced him, we can give him lots of help and he can give us lots of feedback. It is a two-way street.

Now, you may not like my two suggestions--you may like better the suggestions that have come from discussion groups or the ones you have worked out individually for yourselves. All that I ask is that you leave this conference determined not to long for the good old days, determined not to keep on preparing teachers to teach just those students who are most teachable, and determined not to go home and keep on doing exactly the same things that you have been doing in the past.

Assuming that we get appropriations, and I think we will, the Vocational Education Amendments of 1968 provide for the first time in history for adequate financial support for teacher education in vocational and technical education. For the first time in history! It looks to me as if using these funds wisely is going to take every ounce of energy and every minute of time that we can find for the foreseeable future. But, my, isn't it an exciting world?

DIFFERENTIATED STAFFING FOR VOCATIONAL-TECHNICAL EDUCATION

TASK FORCE PAPER
TASK FORCE MEMBERS' REACTIONS
COMMITTEE SUMMARIES

DIFFERENTIATED STAFFING FOR VOCATIONAL-TECHNICAL EDUCATION

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DIFFERENTIATED STAFFING
FOR VOCATIONAL-TECHNICAL EDUCATION

The Need for Differentiated Staff

Among the many anomalies which plague the current structure of American education, there are few which stand out in as glaring a manner as the prevailing model of the teacher's role in a professional staff. Our present conceptions of the teacher's role and his relationship to other school staff originated in the 19th century normal school, when teachers typically had little more than a ninth grade education. Given the level of competence in teachers, it was eminently reasonable to design a school model which provided consultants, curriculum coordinators, and administrators at a higher professional level than the teacher to bail the teacher out of his inevitable difficulties.

But today's teacher bears only a passing resemblance to the normal school teacher of the 19th century. Currently, teachers typically enter the classroom with at least four or five years of college education and they are much more competent both in their subject matter and technical areas and in their ability to deal with students. Unlike the normal school teacher, today's teacher is hardly in danger of being run out of the classroom by his students. And yet, our model of a teaching staff structure remains the same as it was a century ago--teachers at the bottom of the school hierarchy with professionals at higher levels to minister to their difficulties.

Particularly in the area of vocational-technical education, the old normal school model makes little sense. The teacher of nursing, or of woodworking, or mechanics, or typing, or salesmanship does not need a cadre of professional educators above him to resolve his classroom problems. Rather, the master teachers in those areas should have a large staff of practitioners, supervisors, evaluators, and clerical and technical aides as resources in providing the best possible vocational education they can conceive. The problem of the outstanding vocational-technical teacher is no longer one of mere classroom survival, but one of finding and using the human and technological resources necessary to put his most imaginative instructional programs into practice.

Furthermore, the current model of the teaching world treats all teachers, regardless of their expertise or special skills, as interchangeable parts. The outstanding school teacher in an entire district, the untrained and incompetent teacher who got tenure while no one was looking, and the first-year teacher whose ability remains yet untested all receive exactly the same professional responsibilities within the current school structure. Similarly, the beginning teacher who walks into his first full year of classroom teaching enters that situation in the full knowledge that, if he remains a teacher, he will have exactly the same classroom responsibilities, perform exactly the same tasks, and possess exactly the same degree of professional status for the entire course of his 40 year career.

The bitter irony of this situation is that we pretend to our students, and to their parents, and to ourselves that all the students in a given school taking a course entitled "typing I" are getting the same kind of education. And to further compound the difficulties, we have convinced ourselves that the quality of that typing I class can best be judged by the number of students in it. If there are 35, it's not very good. If there are 30, it is about average, and if there are 25, it is exceptionally good. We are doing ourselves and our students a great disservice by perpetuating these fictions, for if we had a choice in the matter, I'm sure we would all prefer to have our children in a classroom of 100 with that outstanding teacher in the district, rather than in a class of 10 with the dullard who sneaked his way into a tenured position. Class size is simply not the most important issue in education right now. What we mean when we argue that a smaller class is more conducive toward learning than a larger class is that if all teachers were equally competent, they could produce more learning in a small class than in a large one. But the point is that all teachers are not equally competent, that they never will be, and that, therefore, any staffing model which assumes that teachers are equivalent is on very weak grounds right from the start.

The fact that a classroom teacher's responsibilities do not change substantially over the course of his entire professional career produces another worrisome irony in the educational realm. As the current structure now operates, the only way a classroom teacher can receive promotions--either in salary, responsibilities, or progessional stature--is by moving farther and farther away from students. Ultimately, if a teacher has enough initiative and stamina, he can move himself up the progessional ladder of teaching so that he earns a substantial salary, carries a very heavy weight of responsibility, possesses a fairly substantial amount of status, and never has to go anywhere near students.

Our commitment to the equivalence of all teachers and our failure to provide ladders of responsibility within the professional realm of classroom teaching have produced more than their share of anomalies in the structure of pre- and in-service teacher education as well. As the situation now stands, pre- and in-service training lie at the poles of a very sharply divided dichotomy. The preservice education of teachers tends to be a fairly intensive set of courses, seminars, and work experiences designed, at least in intent, to give trainees the knowledge, skills, and attitudes required for their successful entrance into the profession. In-service education, on the other hand, tends to be a potpourri of all sorts of things, many of them designed without any consideration whatsoever of their relevance to the professional life of a teacher. "Cruise the Caribbean with Eight Units" or "Around the World in 80 Units" are not exactly the most likely candidates for a focused in-service teacher training program. But within the current educational structure, they probably make as much sense as most other in-service experiences which are offered. Even the more carefully structured in-service experiences in some vocational-technical areas suffer the same ambiguity by failing to demonstrate the difference they make in a teacher's classroom competence. For, given the present dichotomy between pre- and in-service teacher education, and given our lack of differentiation of teaching tasks, accumulation of units in such courses and sufficient aging on the job are the only two criteria which can be used to move teachers up pay scales and out of the classroom.

With the profession structured as it is, it ought to be no surprise that teaching has difficulty in drawing its fair share of the most successful students from academic institutions and from the realm of expert practitioners. No more surprising is the fact that the few exceptionally talented and creative individuals who do enter teaching rarely stay in the profession beyond about three to five years. As it now stands, classroom teaching is simply not a sufficiently challenging and rewarding profession for people with truly exceptional talents. There is no way for an unusually competent teacher to extend his influence, creativity, and responsibilities beyond the limited confines established by the current structure. Clearly, this situation represents a gross wastage of scarce talent and a very unrealistic view of the kinds of talent which will be available to the teaching profession in the future. No one would deny that great improvements could be made in education if every classroom in the country were staffed by a truly exceptional teacher. But it is incredibly unrealistic to assume that such could ever be the case. Approximately 30 percent of all college graduates become teachers. Granted that the median of that group could and should be moved up to the median of all college graduates, there is, nevertheless, no way in which that 30 percent could be drawn *in toto* from a select group of the most qualified students in the country. What *is* reasonable, and what is the essence of the concept of differentiated staff, is for the profession to attract and keep its share of the most outstanding college graduates and experts in their vocational fields for it to use those exceptionally talented individuals in such a manner as to increase their impact upon students, and for it to make use of the less outstanding talents of those other students who wish to go into teaching by providing them tasks and responsibilities which are commensurate with their abilities. Unless the profession restructures itself to provide those kinds of possibilities, it will continue to supply substandard education to those of its students, who, by the process of pure chance, are not exposed to the short supply of outstanding teachers.

It is important to note at this point that merit pay proposals do not supply a promising avenue for changing this situation. True, the ability to offer large sums of money to outstandingly talented teachers will help in attracting a bigger share of education's fair share percentage of the best college graduates and practitioners. But sheer money is not all that it takes to keep an outstanding person in the classroom and even a substantial financial benefit is not likely to keep him in a classroom which offers no room for professional growth, no increase in responsibilities, and no intrinsic reward. Further, the merit pay proposals merely serve to illustrate and emphasize the inequities which the current system deals out to students. Are we willing to honestly confess to students, and their parents, who are not in the classes of merit teachers that we know they are getting sub-standard education because pure chance has given them the wrong teacher? If not, then we should begin to investigate the ways in which we can extend and increase the impact of those scarce outstanding teachers while at the same time providing them the room for professional growth and extrinsic rewards which their own capabilities require.

The teaching profession, then, has simply failed to restructure itself in the way and at the rate that the current educational needs of the country demand. To a large extent, this failure at self-renewal can be attributed to the extent to which the different areas of concern within education have failed to communicate with each other and build upon each other's efforts. When, for example, curriculum innovations in the vocational-technical area are proposed and implemented, they are required to fit within the standard organizational structure of the school and to be usable by teachers trained through the standard procedures. Thus, many very interesting curriculum ventures have gone by the wayside because they could not provide sufficient training for teachers to enable them to use the materials and could not change the organizational structure of the school as to make their implementation more successful. Similarly, innovations in teacher training have frequently been discarded or have failed in practice because new curricula and organizational structures were not designed to go along with them, and recent attempts to change the organizational structure of schools have met with difficulties because of the lack of curricula appropriate to those structures and the absence of teachers whose training enabled them to deal effectively with the new organizational setting. The point is that teacher training, curriculum, and the organizational structure of schools are all very closely interrelated, and that any attempt to implement an innovation in one of the three areas requires close attention to and modification of the other two. A new curriculum in auto mechanics which relied on supervised work-experiences, for example, cannot be tried until the supervisors have been trained and the organization of the school changed so as to allow time and credit for such experience. Furthermore, the current structure of the school wherein curriculum structure, teacher training, and organizational considerations take place at the university rather than at the school itself, makes it virtually impossible for the necessary collaboration between these three areas to occur.

To summarize, the following statements indicate weaknesses of our current teacher staffing patterns which could be alleviated by implementation of a differentiated staff:

1. Current models of teacher-staff use have not kept pace with changes in the qualifications of teachers.

2. The current model, which treats teachers as interchangeable parts, fails to capitalize on the individual professional talents of teachers.

3. In the current system, all promotions of classroom teachers are away from students.

4. Currently, classroom teaching fails to attract its fair share of outstanding people.

5. The lack of challenge, responsibility, and compensation in the teaching profession is driving the most competent teachers out of the classroom in three to five years.

6. The current system does not allow outstanding teachers to have as strong an impact on as many students as they could.

7. The current dichotomy between preservice and in-service teacher training has destroyed the meaningful relationship between the teachers' training and his classroom performance.

8. The current system is slow in adapting itself to the changing needs of society because educators have failed to take account of the interactions among teacher training procedures, curriculum developments, and the organizational structure of the school.

Models for Differentiated Staff

The needs outlined above suggest strongly that radically new models of the teaching role and of the use of teaching talent must be developed. Already, educators are beginning to realize that the use of teacher time in performing purely clerical duties is an avoidable waste of precious talent. Some very important distinctions between the professional and non-professional aspects of the teaching role have already been made, and many schools currently employ clerical aides to free teachers from their slavery to the typewriter and the ditto machine. The point of the differentiated staff concept, however, is that the distinction between clerical and non-clerical aspects of the teaching role does not go far enough.

One distinction, for example, that could be made within the current school structure is that between those teaching roles requiring "primary responsibility" and those requiring "secondary responsibility." In many teaching situations, the teacher-student interactions are so complex that no amount of pre-planning could have produced sufficient decision-rules to cover all the contingencies of the interaction. In such teaching situations (e.g., a small group discussion) the professional talents of a teacher are absolutely crucial, for he must continually make important decisions spontaneously in order to meet the changing demands of the situation. In other situations, however, decision-rules could be specified in advance, and unpredicted professional judgement is not required frequently during the course of the student-teacher interaction. In such situations, the responsibility of the teacher in charge can be described as "secondary." That is, professional judgement is required in specifying the decision-rules for the situation, but non-professionals could just as easily (and much more efficiently) carry out the intent of the decision-rules. As an example of the kind of situation which lends itself perfectly to this model of secondary responsibility, consider the process of swimming pool supervision in high schools. Public swimming pools throughout the country are almost universally staffed by high school and college students who have earned a life-saving certificate which indicates their knowledge of and ability to carry out the regulations arrived at by higher powers. But in the high school, only certificated teachers are allowed to supervise the swimming pools. The point is that swimming pool supervision is a task which non-certificated personnel can quite easily perform, and wherein certificated personnel need only specify the decision-rules to be followed in the swimming pool situation. And yet public schools continue to waste valuable teaching time by requiring teachers to carry out decisions which they need to make, but which others could implement quite efficiently. Furthermore, there are many similar situations wherein teachers could specify the ground rules and non-certified personnel could carry them out--e.g., lunch room supervision, large group movie presentations, study halls, woodworking shops, and typing practice rooms.

But even this preliminary distinction between primary and secondary responsibility is only a first step toward making the task analysis of the teaching role which is implied by the notion of differentiated teaching staff. In addition to making careful delineations between the professional and para-professional aspects of teaching, it is necessary to distinguish different levels and different kinds of competence and responsibility within the professional domain of teaching. Thus, model I at the end of this paper, though a good first step toward staff differentiation, fails to go far enough in making the within profession distinctions required of a thoroughly differentiated teaching staff model. It is important to note at this point that the concept of differentiated staff can be conceptualized and implemented through a large variety of different models. Different models may be more appropriate for different vocational-technical areas or for particular school settings, but the essence of the concept can be summarized by the following requirements:

1. The model should include at least three different kinds and levels of competence and responsibility.

2. The top salary range should be at least twice the bottom salary range.

3. The model should provide opportunity for outstanding individuals to have a large impact on many students.

4. The model should both provide real avenues for professional growth and changing responsibilities, and at the same time make realistic use of those teachers who do not wish to assume the full responsibility of a "master teacher" position.

As a possible model for implementing the differentiated staff concept, consider the one outlined in figure 1 (see next page). This model represents four different categories of teachers with a salary range from $6,500-$25,000. Under this model, teachers in

DIFFERENTIATED TEACHER STAFF
COMPENSATION AND RESPONSIBILITY

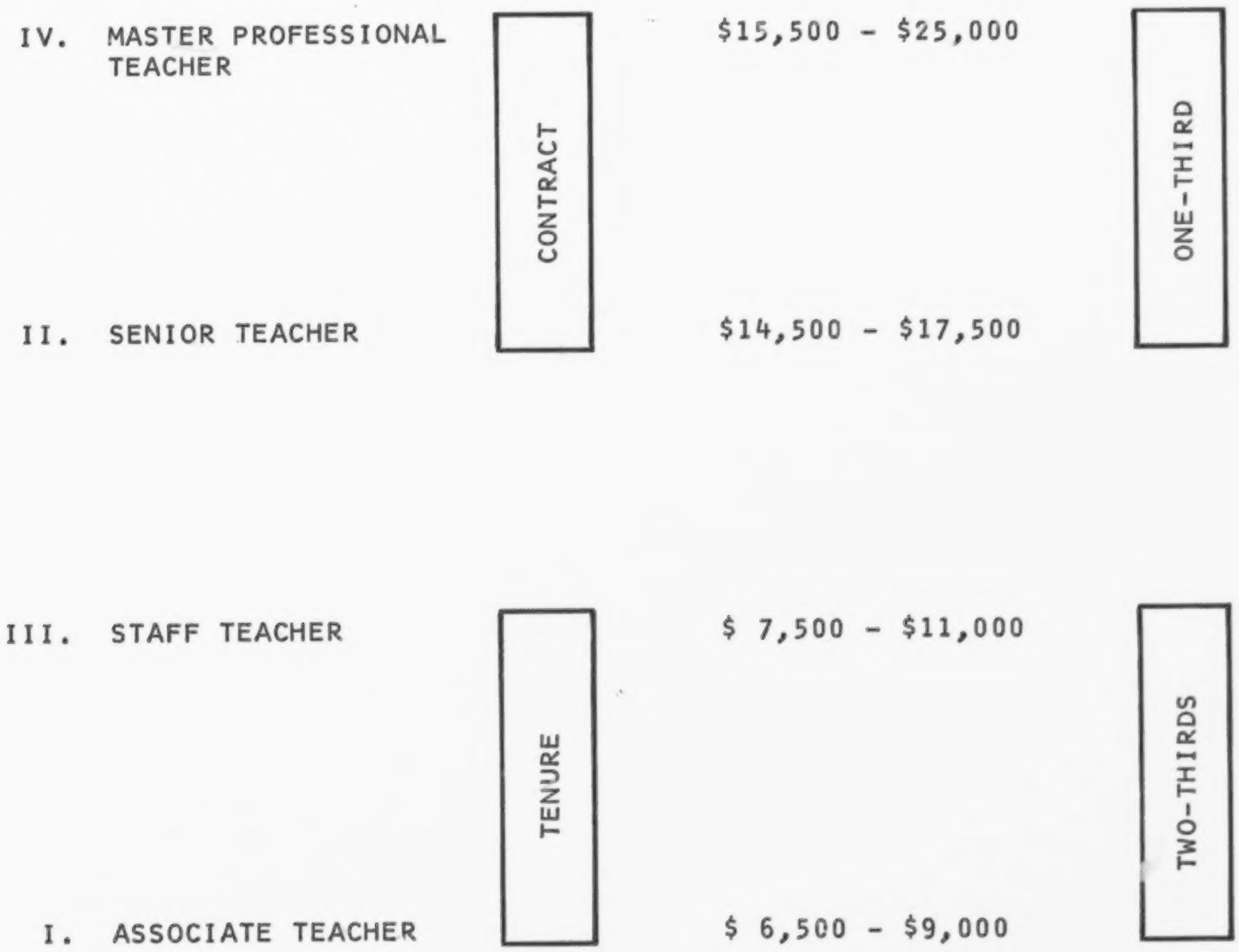

IV. MASTER PROFESSIONAL TEACHER
$15,500 - $25,000
CONTRACT
ONE-THIRD
II. SENIOR TEACHER
$14,500 - $17,500
III. STAFF TEACHER
$ 7,500 - $11,000
TENURE
TWO-THIRDS
I. ASSOCIATE TEACHER
$ 6,500 - $9,000

FIGURE 1

the top two categories would be employed on a contract and teachers in the bottom two categories would have typical nine months tenured positions. As long as a teacher was employed under any one of the four categories, he would undertake the responsibilities and receive the compensation associated with that particular category. The important point is that promotion from one category to another or entrance at any given level must be based on the applicant's ability to perform the specific functions of the particular teaching role.

Under such a model of differentiated staffing, many of the difficulties mentioned in the first section of this paper can be eliminated. First of all, automatic promotion based on years of service or course units accumulated can be eliminated. Promotions within and into a differentiated staff structure would be based on the teacher's specific ability to meet the responsibilities of the position for which he is applying. Second, the implementation of such a differentiated staff forces us to identify the specific responsibilities which pertain to each level of teacher. The detailed identification of these responsibilities would involve a considerable amount of time and "action research." But a first approximation might be to consider the associate teacher as the doer--i.e., the one who carries out curricula developed by more senior personnel, e.g., a distributive education lecturer or a work-experience supervisor in a secretarial setting; the staff teacher as an illustrator--i.e., one who begins with a generally developed curriculum and enriches it in many ways; e.g., a woodworking specialist who begins with a curriculum and is free to embellish it via demonstrations, practicums, or lectures; the senior teacher as a shaper of the concepts of the curriculum--i.e., one who applies a curriculum in detail to the local needs of a particular school, e.g., a health occupations specialist who begins with a nationally developed curriculum and adapts it to her local school setting; and the master teacher as an anticipator--i.e., one who evaluates local needs and builds curricula which anticipate changes that will be needed in his local educational enterprise, e.g., an auto mechanics expert who anticipates the need for specialists in his local curriculum. Agreement on these particular differentiations of responsibility is not the crucial issue but the point is that each category of teacher should have substantially different responsibilities, and the higher levels of teaching positions should involve increasing responsibility by way of larger influence over a greater number of students.

Third, the model provides real avenues for professional growth, and thus a realistic means of attracting and keeping outstanding young talent in the high school classroom. Fourth, the model provides for the use of many talented people who do not wish to accept the full responsibility of a master teacher, but could perform invaluable services at, say, the associate teacher level. Within a differentiated staff, vocational-technical education could begin to make more effective use of the many practitioners in the field, retired and active, whose expertise is currently being tapped only occasionally. The retired carpenter could be hired part- or full-time to give demonstrations, to supervise wood shops, and to help in building curricula even though his formal training as a teacher was minimal. The currently practicing secretary could be hired part-time to fulfill similar functions, or to serve as an on-the-job supervisor for students serving in internship-secretarial positions. The possibilities for employing vocational-technical experts at all levels in a differentiated staff are only as limited as our imagination in combining the talents of relevant people. Fifth, the model facilitates the process of innovation by providing a structure within which curriculum, teacher training, and school organizational structure can be jointly considered and modified. And finally, the model provides possibilities for identifying and using differential staff talents. Teachers who are excellent in terms of their creativeness but weak in the area of classroom control could be employed effectively under such a model at a level of responsibility which minimizes the necessity of their exercising classroom control skills.

There are several features of the general concept of differentiated staff which must be worked out specifically within the context of the school and vocational areas of each particular implementation. The top man on the differentiated staff hierarchy, for example, will be receiving very substantial compensation for his services and thus should be invested with a great deal of responsibility. But the precise nature of those responsibilities, the specific roles and duties of a $25,000-a-year master teacher, cannot be worked out a priori but must be worked out within the context of several different implementations of the differentiated staff concept. Thus, the master teacher might be a setter of priorities and identifier of needs, or he might be a long term curriculum builder, or he might be an in-service educator with substantial responsibilities for training teachers lower down on the staff hierarchy. The crucial point is that the master teacher must have responsibilities which are commensurate with his compensation, and must thereby extend his influence to a greater depth and to a large number of students.

Somehow, the outstanding teacher must, through a differentiated staffing model, be supplied with a lever whereby he can increase the depth and breadth of his influence over students. For each master teacher, this may have to be done in a slightly different manner, but some general categories can be developed to suggest the variety of possible levers for influence. A differentiated teaching staff structure can increase the influence of a master teacher through: 1) Technological means (e.g., video tape) which make his classroom teaching available to more students; 2) training of disciples who perpetuate his most crucial ideas and characteristics; 3) training of aides who implement the components of his major ideas; 4) selection and in-service training of teachers based on the master teacher's judgement; 5) implementation of broad curricula developed by the master teacher; 6) full coordination of a large segment of the school's educational enterprise by the master teacher. These suggestions in no way cover the field, but merely stand as examples of the kinds of levers which a master teacher can use to extend his influence, directly and indirectly, over students.

An alternative model of differentiated staffing which might be more appropriate to the vocational-technical area than the other possibilities which have been suggested might be called the "executive secretary" model.

Under this model (see Figure 2), a diagnostician with the help of relevant staff (psychologists, evaluators, tests and measurements specialists) would develop a suggested learning package for each student based on available instructional resources and the student's needs and abilities. The student would then be responsible for carrying out the activities in the package via a staff of instructional specialists (lecturers, small group leaders, shop and lab supervisors, internship supervisors, etc.). The executive secretary (learning activities monitor) would have the task of over-seeing the student's progress through the "package." If at anytime the student was not progressing, or was dissatisfied with his instructional activities, or was simply not attending any activities, the monitor would have the responsibility of notifying the diagnostician so that a different, more appropriate learning

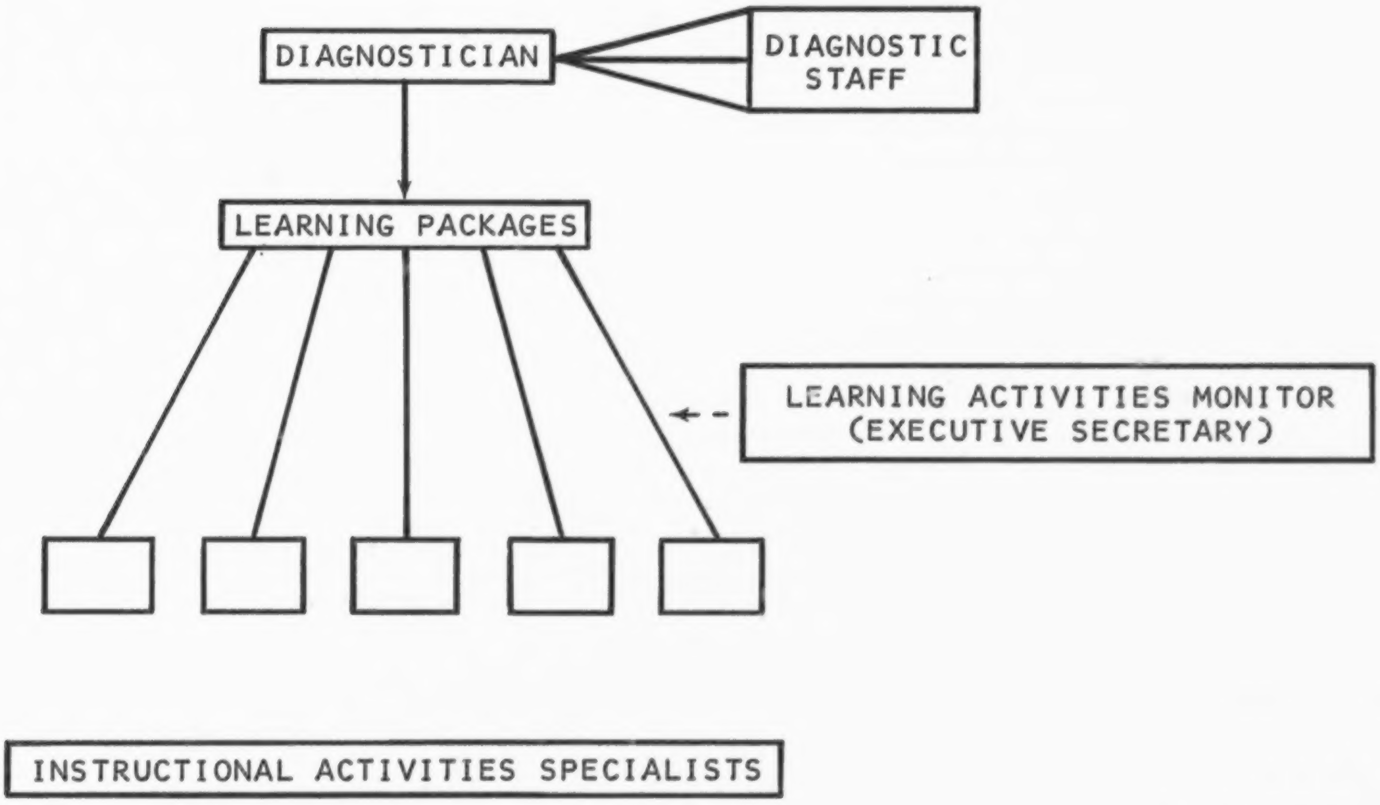

DIAGNOSTICIAN
DIAGNOSTIC STAFF
LEARNING PACKAGES
LEARNING ACTIVITIES MONITOR (EXECUTIVE SECRETARY)
INSTRUCTIONAL ACTIVITIES SPECIALISTS

FIGURE 2

package could be designed. This model might well have the advantage of providing a sufficient cadre of pedagogical experts to make effective use of the large number of practitioners in the field who have no training education and are, thus, not currently used in the schools.

A differentiated teaching staff opens up a wide range of new possibilities for vocational-technical education. Curricula in the vocational-technical areas can be designed which call upon local experts and practitioners to teach on a part-time basis in the school, and, at the same time, local job opportunities can be capitalized on as meaningful settings for internships. One of the chief roles which might be expected of a master teacher in the vocational-technical area will revolve around his responsibility for setting priorities and needs, designing work-experience-based curricula, providing training for local practitioners to serve as internship supervisors or part-time teachers, and serving as a counselor or liaison between students and members of the local community. The important point is that the particular responsibilities of each level within a differentiated staff must be designed via an on-going process which takes careful account of the particular needs of each school and subject area.

Teacher Education for Differentiated Staff

The corner-stone of any teacher training program which intends to prepare teachers for positions within a differentiated staff is the notion of performance criteria. One of the basic premises of the differentiated staff concept is that teacher training and promotion should be based on the demonstrated competence of teachers, rather than their length of service or the number of units they have accumulated. Thus, a first step toward providing adequate training for teachers entering a differentiated staff is the careful task analysis of each role and level in that particular differentiated teaching staff structure. Associated with each teaching role must be a set of criteria which indicate the minimum level of competence expected of a teacher performing that particular role. The task of developing such criteria is not an easy one, but it is essential both to the development of adequate teacher training procedures, and to the careful delineation of the different responsibilities associated with different teaching roles.

One fruitful approach toward developing the performance criteria necessary for adequate teacher training in a differentiated staff is to develop the criteria in three different areas related to the teaching act: 1) subject matter or technical competence; 2) presentation or demonstration skills; and 3) professional decision-making and human relation skills. The first general area focuses on the substance of what the teacher will teach. One of the most difficult tasks facing teacher education is the specification of performance criteria rather than the current time and unit criteria in such content and technical areas. What general knowledge should all vocational-technical educators have? What specialization and in-depth knowledge should a teacher in a particular vocational-technical area demonstrate? What degree of technical skill should a wood shop supervisor or a distributive education lecturer have? What different performance criteria are relevant to different contextual situations (e.g., primary vs. secondary schools, college preparatory vs. culturally disadvantaged schools) and to different professional roles in a differentiated staff (e.g., master teacher vs. staff teacher, large group lecturer vs. shop supervisor)?

A second general area which requires specification of performance criteria is that which might be labelled "behavioral skills." To some extent, at least, the complex act of teaching can be broken down into such simpler sets of trainable skills as reinforcing student participation, higher order questioning, varying the stimulus situation, and use of examples to mention only a few likely candidates. Any training program which effectively places such skills within the teacher's repertoire is going a long way toward providing conditions under which the teacher may be a professional decision maker. Once again, of course, the concept of differential staff suggests that there should be different behavioral skills criteria for different teaching roles. For example, does a lecturer on distributive education need the same level of competence in reinforcing student participation as does a supervisor of electronics laboratories?

The final area in which performance criteria are required is undoubtedly the most demanding, and quite possibly the most important. We all recognize that effective teaching is more than subject matter plus an active repertoire of behavioral skills. The "something more" might be designated as professional decision-making and human relation skills. Such vague traits as respect for students, spontaneity, empathy, realism, and acceptance are intended to be included under this heading. The great difficulty here is that, as professional educators, we have strong beliefs that such traits are in no small way crucial to successful teaching. Yet we have not, at this point, defined them precisely enough to develop criteria which will detect their presence or absence. And, even in the realm of these more difficult to specify criteria, we cannot be satisfied with specifying one set of all-or-none criteria for use with all teachers and all situations. We must again specify which criteria are most important at which different levels for which particular teaching roles.

The task of specifying such a comprehensive set of performance criteria is not an easy one, but a differentiated teaching staff structure can be of much help even in developing the criteria. Thus, a differentiated staff can be implemented before the responsibilities and criteria attached to each role are clearly specified, and those delineations can become part of the on-going work of certain members of the teaching staff. Once the performance criteria have been developed, even on a preliminary basis, the process of teacher training becomes a very exciting one. First of all, the distinction between pre- and in-service training becomes what it ought to be, a continuum rather than a dichotomy. Thus, preservice training would be directed toward enabling people to meet certain minimum levels of performance before they were allowed to enter the teaching profession. And, in-service training would be directed toward 1) assuring, through both diagnosis and training, that teachers maintained adequate performance on the "entry criteria;" 2) providing continuing diagnosis to the teacher so that he knows exactly where he stands in terms of fulfilling the criteria relevant to all teaching roles in the differentiated staff structure; 3) providing training for teachers who wish to move to another role within the staff structure by demonstrating their competence to meet the performance criteria attached to that new role; and 4) training those practitioners in the field who wish to have some lower level of responsibility within the schools.

Second, the whole process of teaching training, both at pre- and in-service levels, becomes one in which competence, not time, is the standard of excellence. If a beginning teacher can meet all of the required criteria within a year, he can be certified without having to sit through three years of useless courses. A teacher can be certified to teach at a particular level in a differentiated staff when he demonstrates that he meets the performance criteria developed for the particular role. His entry into any role in the teaching staff structure is dependent solely on his competence and not upon the length of his service or the number of courses he has taken.

Third, the availability of performance criteria allows all teachers, at whatever level and in whatever role, to be continually receiving diagnostic feedback regarding which performance criteria they have met, at how high a level they have met them, which performance criteria they have yet to meet if they wish to move into a new role, and what training experiences are available for them to meet the criteria which are prerequisite to the new roles they wish to assume.

The combination of a differentiated teaching staff structure and a teacher training program based on performance criteria for each teaching role, and with alternate training experiences designed to help teachers meet those criteria, opens a pandora's box of possibilities for restructuring education and making it more flexible to society's demands. People with a high degree of teaching competence can assume large amounts of responsibility with a high level of compensation on the basis of their demonstrated abilities. Other teachers can assume less taxing roles, and if they wish to move up the ladder of responsibility, they may receive in-service training which is specifically designed to help them assume the higher levels of responsibilities they wish to have. Furthermore, a whole realm of possibilities in allowing students to be teachers could be explored. Students could be allowed to teach material that they currently were learning; to teach material they already know on a service basis; and even to teach material they know very well on a compensated basis. The development of new roles for teachers in a differentiated staff allows us to re-think the role of students and their relationship to teachers. When students are very knowledgeable in a particular area, it makes good sense to use their resources in educating students and teachers alike, with no need for teachers to feel defensive about their new roles as students. Perhaps, in fact, teachers should expect their students to use what they have to offer in going beyond the skill and expertness of their teachers. The notions of students as teachers and teachers as students are ones which can and should be explored in all their aspects through a differentiated teaching staff model.

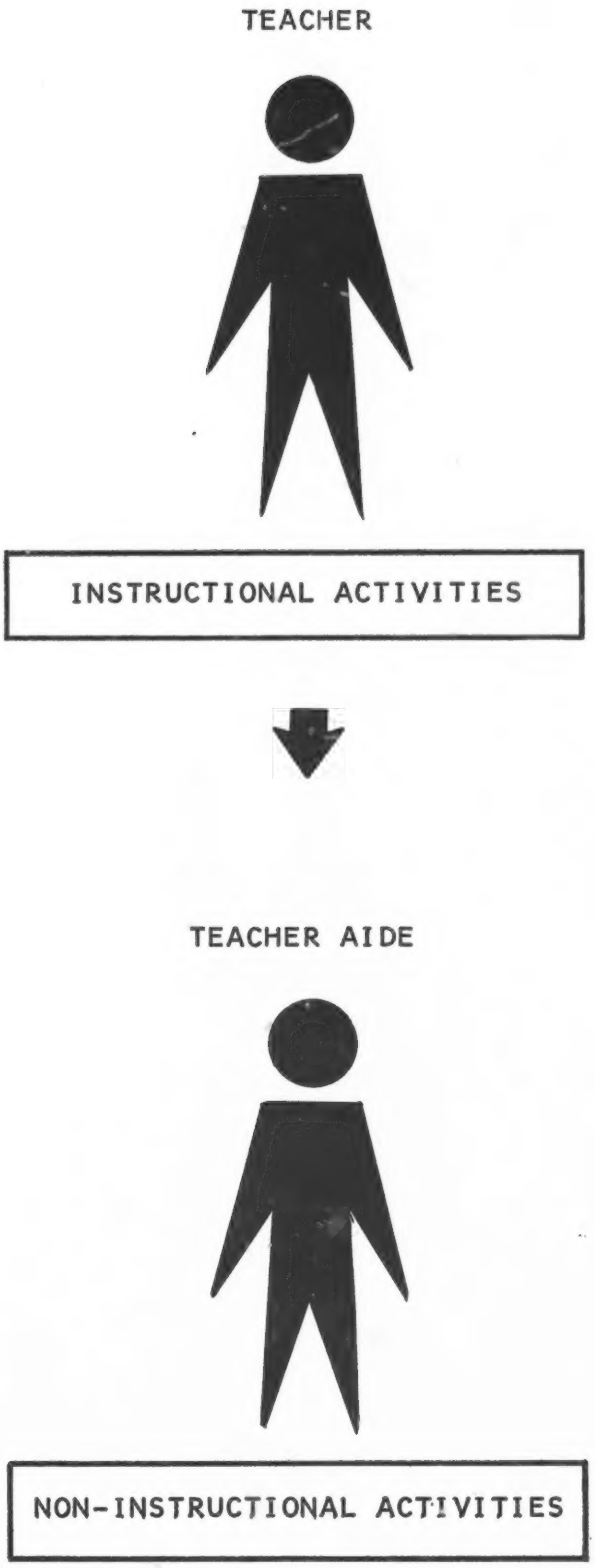
Furthermore, a differentiated teaching staff structure allows schools to meet the needs of their local situations by providing them a context wherein the teachers themselves may design curricula, experiment with new organizational structures, and implement their own teacher training strategies. Individual schools, with cooperation from local teacher training institutions, can use their master and senior teachers 1) to provide diagnosis and teacher training experiences to their colleagues; 2) to organize local, intensive, curriculum building efforts; and 3) to devise organizational structures of the school which facilitate innovations in the other two areas. The mere fact that local schools would be participating in such massive restructuring efforts could go a long way toward drawing more competent people into the schools while at the same time encouraging all educators to achieve their maximum level of competence in order to receive the responsibility and compensation which is commensurate with their talents.

The area of vocational-technical education would appear to be more ripe than any other field for change toward a differentiated teaching staff. The development of performance criteria for teachers in technical fields, though still difficult, will be somewhat less demanding than in such areas as humanities and social sciences. Furthermore, the uses to which community practitioners and part-time staff teachers can be put are more obvious and perhaps more extensive in the vocational-technical area. The master practitioners of a wide variety of crafts and trades, but with little formal education, virtually wait in readiness for professional vocational-technical educators to make use of their talents within the schools. Through being bold and imaginative in their implementations of differentiated teaching staffs and teacher training programs to suit, vocational-technical educators can become the impetus for relevant change in all areas of education over the next few decades.

Differentiated teaching staff structures and teaching training programs built around the concept of performance criteria are at the cutting edge of a system of education which is finally becoming self-conscious about its need for change. The specific nature of teacher training programs and staff structures will have to be worked out in detail to suit each individual school which implements the two concepts. The broad descriptions mentioned in this paper can at best serve as heuristic guidelines toward meeting the vital needs which the teaching profession so obviously faces. Questions of success and failure in meeting those needs will ultimately abide in the school systems and educators who have the boldness and imagination to implement them in their local areas. One thing, however, is clear: current models of teacher training and placement are not meeting the needs of a rapidly changing society. If we fail to be imaginative in our implementation of such concepts as a differentiated staff and performance criteria, then we may well regulate the profession of teaching to a status comparable to alchemy--a once interesting but no longer viable endeavor.

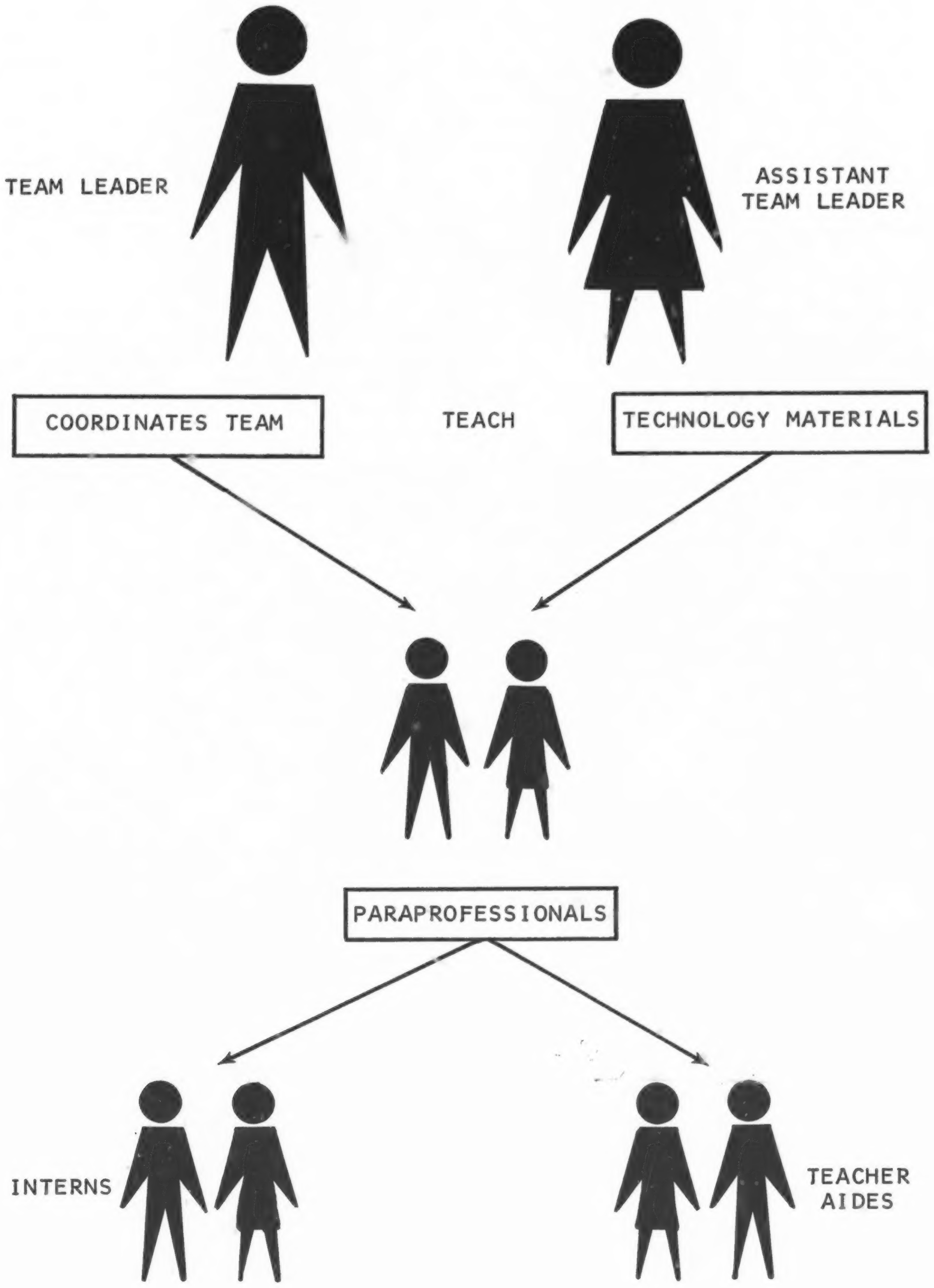
STAFF DIFFERENTIATION

(MODEL #1)

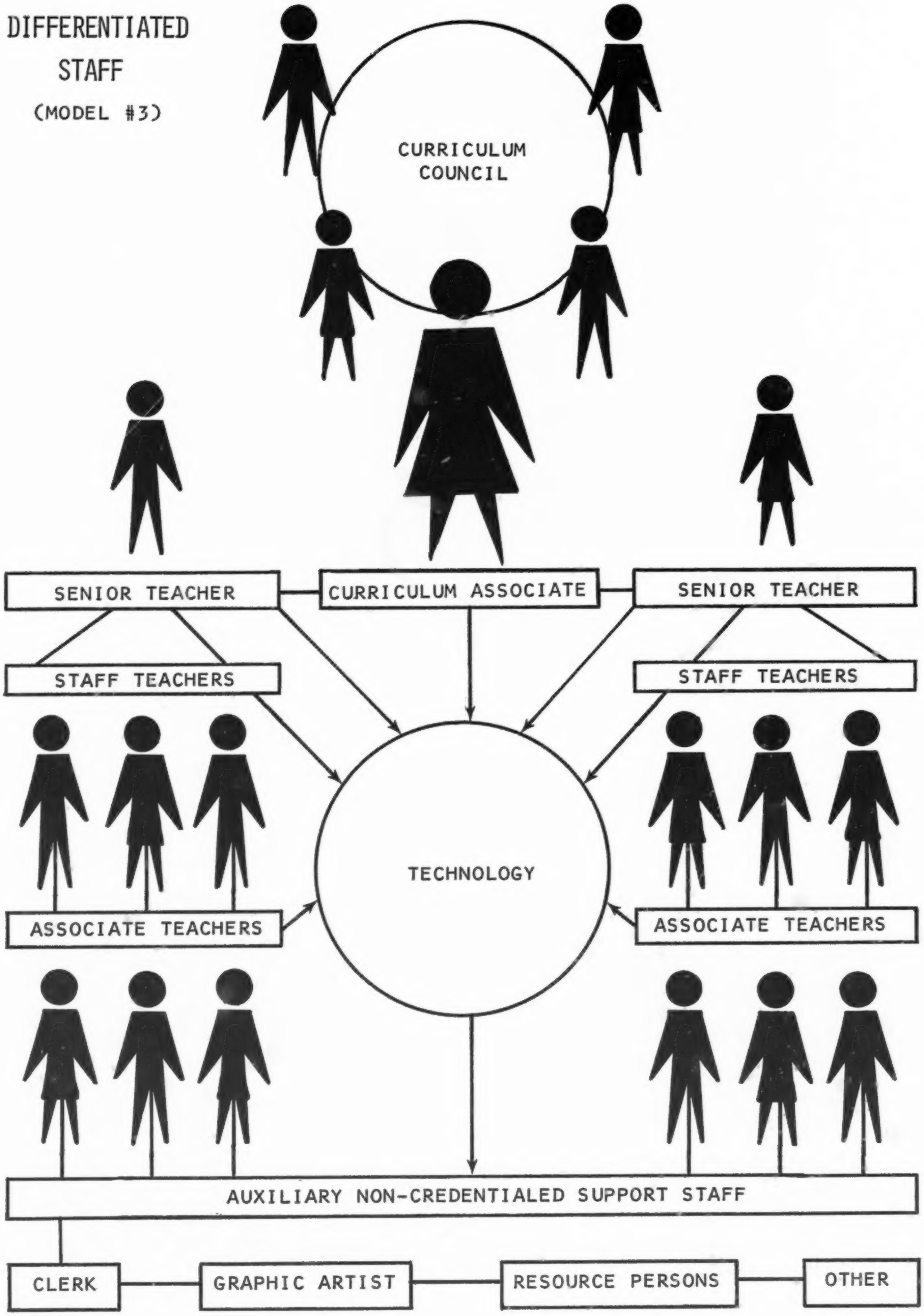

TEACHER
INSTRUCTIONAL ACTIVITIES
TEACHER AIDE
NON-INSTRUCTIONAL ACTIVITIES

INSTRUCTION TEAM
STAFF DIFFERENTIATION

(MODEL #2)

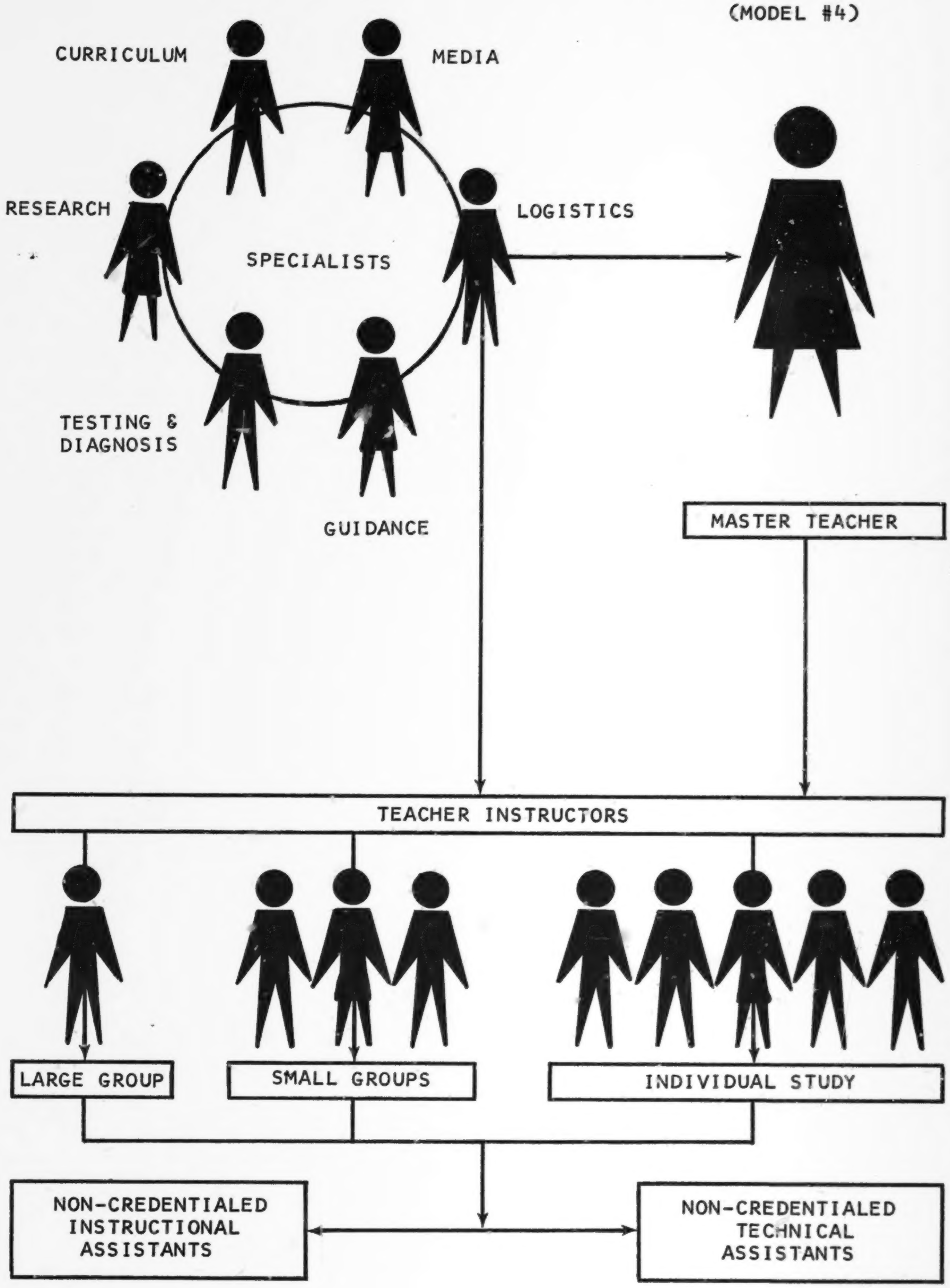

TEAM LEADER
ASSISTANT TEAM LEADER
COORDINATES TEAM
TEACH
TECHNOLOGY MATERIALS
PARAPROFESSIONALS
INTERNS
TEACHER AIDES

DIFFERENTIATED STAFF
(MODEL #3)


CURRICULUM COUNCIL
SENIOR TEACHER
CURRICULUM ASSOCIATE
SENIOR TEACHER
STAFF TEACHERS
STAFF TEACHERS
TECHNOLOGY
ASSOCIATE TEACHERS
ASSOCIATE TEACHERS
AUXILIARY NON-CREDENTIALED SUPPORT STAFF
CLERK
GRAPHIC ARTIST
RESOURCE PERSONS
OTHER

DIFFERENTIATED STAFF

(MODEL #4)


CURRICULUM
MEDIA
RESEARCH
SPECIALISTS
LOGISTICS
TESTING & DIAGNOSIS
GUIDANCE
MASTER TEACHER
TEACHER INSTRUCTORS
LARGE GROUP
SMALL GROUPS
INDIVIDUAL STUDY
NON-CREDENTIALED INSTRUCTIONAL ASSISTANTS
NON-CREDENTIALED TECHNICAL ASSISTANTS

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TASK FORCE MEMBER REACTIONS

REACTIONS TO DR. ALLEN'S PAPER

L. O. Andrews*

This paper gives an excellent overview of the rationale and operation of differentiated staffing in public education as it has been developing these last several years. As such it gives the members of the Teacher Education Seminar a foundation from which to work and also many different illustrations with which most participants should be familiar. If the seminar were dealing with elementary education or the secondary academic fields, most of the paper would be directly applicable; but the field of vocational and technical education is sufficiently different that much adaptation is necessary. And it is precisely because of those differences that vocational education will tend to shy away from the whole concept of differentiated staffing without seriously considering the possibilities. But at the same time for these very reasons the whole notion of differentiated staffing is most important in the vocational and technical field in order to assist in solving many of the problems now faced in this important segment of American education.

Hopefully the participants in the various sections in Chicago will spend much of their time in testing out new models, new designs and imaginative ways in which differentiated staffing can be made functional. To lay some small portion of the background for that effort, this critique will list a number of the differences that do exist between academic secondary education and vocational and technical education and some of the more obvious adaptations to differentiated staffing as a point of departure. The following are some observations about vocational and technical education which indicate some of the difficulties and problems:

1. Vocational and technical education as such is now and seems likely to be emphasized especially at the eleventh and twelfth grades extending into the thirteenth and fourteenth. Although practical arts and some vocational subjects (industrial arts, home economics, agriculture, and business) are taught from grades seven through ten most of this work is really general education and not vocational as such.

2. Most vocational and technical teachers (grades 11 up) are actually the only teacher in a given school teaching a given field or given subject. Many of the older vocational programs are in relatively small schools, and many of the

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newer programs are so highly specialized that a vocational and technical teacher seldom has a class with exactly the same subject matter as any other teacher in the same school.

3. Relatively few situations, therefore, present themselves in which classes can be combined for large group instruction.

4. Some vocational and technical teachers enter service with a degree and the usual provisional certificate. Many others begin teaching with occupational competence and almost no college except perhaps a pre-school workshop.

5. Most vocational and technical teachers acquire respect from pupils, colleagues, and parents on the basis of their technical knowledge and skill and to a much lesser extent on their academic status or professional competence as a teacher. The extent to which this is a factor is illustrated by the frequent closing of a vocational department or shop because of the inability to secure a teacher--something which is seldom done in elementary grades or secondary academic subjects.

6. Few persons really knowledgeable or skilled in a specific vocational and technical field are likely to be interested in a subordinate, assistant or paraprofessional role, since the opportunities and pay are likely to be so much greater to remain in the occupational field.

7. Beginning teachers in many vocational and technical fields have a considerable period (a year or two) of what is virtually an internship to get acclimated to teaching. During this period many may have trouble working with any subordinate instructional personnel--they really are not ready to direct others in teaching even though they are experts in the technical knowledge and skill of the area.

8. In the so-called "co-op" programs a substantial fraction of the time is given over to the direction of on-the-job laboratory experiences. In larger businesses and industries there may be ways for teachers to develop strong supervisory personnel for these young workers within the organization itself--another type of staff differentiation. But many of these young trainees are in small establishments where the success of the educational program depends almost entirely upon the teacher himself.

9. One of the ultimate objectives of differentiated staffing in vocational and technical education is to find ways for the outstanding teacher to have a greater impact on his individual pupils through more direct, personal, teacher-pupil relationships. This is in contrast to one of the usual objectives of differentiated staffing in which it is hoped that outstanding teachers will increase contact with a greatly enlarged number of learners.

10. Much of the vocational and technical instruction consists of pupils learning higher order technical skills and practicing them, with far less large group activities than in many other subjects.

SUGGESTED ADAPTATIONS

Some aspects of differentiated staffing can be put to work in most vocational and technical situations, but many others will require exploration, adaptation and extensive modification. Since many vocational and technical teachers are taking their professional preparation and college work right along with teaching over a period of several years, in-service education plays a large part in their development. As differentiated staffing proceeds in a given state, considerable emphasis can be given to it in these in-service courses, such as helping the teacher learn how to decide what subordinate personnel can and cannot do procedures for directing the work of other types of personnel and how to make effective use of available specialists. One of the primary goals of differentiated staffing in vocational and technical education should be to provide the one teacher areas (of which there are so very many) with enough assistance so that each teacher can actually do the level of professional work desired--become the setter of priorities, the identifier of needs, the designer of a work experience based curriculum, the builder of a liaison between pupils and the community, or even become a teacher trainer.

Subordinate Personnel

Identifying the types of paraprofessionals and fitting them into the organization is probably the easiest place to begin with differentiated staffing in vocational and technical education. Some of the obvious types follow:

1. *Clerical aides.*

2. *Media aides.* They assist primarily with the operation, storage, and use of educational media.

3. *Technical aides.* One of the most significant services they can perform is in the preparation of teaching aids, mock-ups, displays and the like under the direction of the teacher.

4. *Technicians.* Some of the larger schools with larger departments should be able to find true technicians who can come in as subordinate personnel but who do have occupational experience and competence.

5. *Interns.* Several types may be involved here--post-degree trainees, occupationally competent persons getting an introduction into teaching before taking on full responsibility, student teachers in some of the fields which turn out degree holding beginners, and various levels of field experience students.

Specialists

These persons might be at two different levels--some might be coordinated with staff teachers and senior teachers or some of them might be teaching positions to which these classes of teachers would aspire as master professional teachers. In either case, the person would have acquired a very highly specialized type of knowledge and skill and would be able to provide this special service for a considerable number of teachers in a rather wide range of subject fields. The real problem is in the depth of the coverage which these persons can give. Because of the great specialization of knowledge and skill in these wide ranging technical fields, no one person is likely to be very facile with the actual content of more than one or two fields. Thus the teacher of the speciality, himself, must be prepared to make a wider range of decisions than would be true if the specialists could be competent, actually, in a variety of teaching fields. Some possible types follow:

1. Specialist in testing and diagnosis
2. Specialist in educational and vocational guidance
3. Specialist in learning and in the study of teaching
4. Curriculum specialist (in general but not in the subject matter of every field)
5. Specialist in instructional media, their preparation and use

The Teaching Team

With five fifth grades or five English classes each period the task of designing a teaching team with at least three basic levels is relatively simple. But the same kind of differentiation is hardly possible with a single teacher of diesel mechanics, or electronics, or vocational agriculture, or vocational home economics Two simple alternatives quickly come to mind. First, the teacher could have the designation of the type of teacher corresponding to the level of competence which he had demonstrated. The arrangement of his subordinate aides and specialists colleagues would be determined by this demonstrated level of competence.

The second alternative might be designed to produce certain types of instructional specialists and curriculum specialists who might then be related to teachers in several different neighboring schools. Formerly most states had some type of "itinerant teacher trainer" in certain vocational fields and two or three levels of such positions might evolve. True, some organizational problems would be present but these have been solved in other fields at different times.

The real test of the imagination and creativity of a group of vocational and technical educators will come in their ability to design some levels of teacher status such that the quality of instruction could be improved and the outstandingly competent teacher would have a position of true prestige, service and compensation to which to aspire.

REACTIONS TO DR. ALLEN'S PAPER

Marjorie East*

The concept of differentiated staffing is particularly important in vocational education since we need people with different kinds of skills and abilities to work with our students. We need technicians, work experience coordinators, demonstrators, counselors, to name just a few. The performance criteria are informal and imprecise at present, but we can write job descriptions for many kinds of specialists.

There are a number of problems in implementing the concept. But solutions can be found. For example, here are some obvious difficulties with possible solutions:

> To differentiate a staff in one school there must be several teachers in one subject, yet this is not always or even often the case. But three schools might have three to five teachers. If the schools are within 20 miles of each other, a differentiated staff might well be accomplished through use of flexible scheduling, local teacher aides, large group instruction, and modern instructional media.
>
> The paradigm seems to assume that ambition is always accompanied by ability. Yet the achievement of an advanced degree or a "competency level" does not insure leadership or status within a group of teachers. These are awarded by a group, they cannot be conferred as a reward in a system of meritocracy. A subtle yet stringent selectivity could operate within a prospective team whereby some (and not others) are encouraged to prepare for leadership roles.
>
> Teachers will need to be educated for the different roles, but this cannot in most cases be done at pre-service levels. Geography rather than professional specialization has the most influence on who takes which job. Training programs can operate in-service: the teacher locates himself geographically, joins a team, finds his niche in the differentiated hierarchy, then gets in-service training.

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These and other problems and possible solutions would apply to most models for differentiated staffing. The models presented by Dr. Allen and Mr. Wagschal concentrate on a vertical hierarchy with different rewards attached to different levels of competence and responsibility. I wish to explore a horizontal model with a staff differentiated more by their special competencies with youngsters and with subject matter, and by their experience and their time commitment, rather than by hierarchial levels.

For my model I have chosen a teaching situation from the area of home economics. Let us assume a course in consumer problems of the family which is taken by all vocational education students in a school and is elective for other students. There are perhaps 100 students each term.

Teacher A is a regular certified teacher. He (or she) works full-time. His special competences are a knowledge of adolescents (all kinds) and an organizing, managerial ability since his particular duties are these:

- To select from the curriculum plan and the curriculum materials (which were developed and collected by someone at a higher level) those concepts and learning experiences appropriate to the particular students in this group. (Probably a diagnostician elsewhere in the teaching system has looked at each student.)
- To organize and schedule the content, experiences, and the teacher team.
- To coordinate the learning from the several facets of the course through lectures, films, and other large group activities.
- To evaluate student learning.

Teacher B is also a certified teacher but works only one-fourth time. She is a specialist on characteristics of local families and in teaching techniques of group discussion and use of the case method. Her special duties are:

- To contribute to the case materials developed by specialists in curriculum materials.
- To meet with students in small groups for reinforcement of concepts, discussion of readings, trips, and cases.

Teacher Aides would be noncertified assistants who were given special training to suit them for working with students on individual assignments, laboratory tests, surveys, etc.; working with clerical duties; or in transporting students. One or two of them would work one-fourth or one-half time.

Specialists from the Community would be nonteacher experts who gave perhaps two or three days a year as guest teachers.

Coordinators for distributive education, health education, trade and industrial, agricultural, health occupations and business and office education would also give some time to the course. Many of the students would be in occupational programs in the several areas. The coordinators would know the concepts being taught in the consumer courses and would help students to use concepts from it in their other courses and on their jobs.

How does this model contribute to the overall idea of differentiated staffing? It exemplifies the principles of differentiated competencies and duties. It assigns responsibility specifically enough so that performance criteria could be developed. This model expands, also, along the horizontal dimension. It shows ways to use different amounts of time as well as different amounts of types of competence. As a woman I am sensitive to the fall-out rate of female teachers from the profession. Many of these women fully qualified and experienced teachers, would welcome a chance to develop specialized competence and to use it in a part-time job.

I suggest that horizontal differentiation, within the same hierarchical level, is a useful addition to the important concept of staff differentiation.

REACTIONS TO DR. ALLEN'S PAPER

L. W. Erickson*

Differentiated staffing, as developed in the paper by Allen and Wagschal, is based upon the assumption that great individual differences exist among teachers. These differences in teaching competency exist even among teachers with similar education and experience. It follows then that it is not desirable to require every certificated teacher to play all the roles required of the classroom teacher. Allen and others, therefore, believe that the traditional staffing pattern ought to be replaced by a new staffing pattern, aptly labeled "differentiated staffing." The differentiated staffing pattern usually includes such professionals as the so-called master teachers, senior teachers, staff teachers, and associate teachers, and such subprofessional personnel as teacher-aides, interns, secretaries, and clerks. In this staffing pattern it is assumed that many of the responsibilities normally assigned to a professional teacher can be discharged as well or better by a noncertificated person who would receive a lower salary than that paid to the various levels of the certificated teaching staff.

It would seem logical, at least, that a differentiated staffing pattern would be vastly superior to our traditional staffing patterns in all areas of education; nonetheless, it will be necessary to evaluate carefully long-term changes in students as a result of their experiences in schools using the differentiated as opposed to the traditional staffing patterns.

Let us look, then, at a differentiated staffing pattern as it might be applied to the business education teaching field, and specifically to the teaching of typewriting. (Typewriting is one of the most popular subjects, in terms of enrollment and value to the student, taught in our secondary schools today.) With a differentiated staffing pattern, it would be easy to utilize effectively large-group instruction in teaching typewriting. Several teaching strategies or plans could be devised. For example, Plan I might work as follows in a school which has as many as 600 students taking beginning typewriting. A master teacher would instruct 120 students each period for five periods. He would be assisted by three teacher aides who would each be responsible for 40 students. Under the guidance of the master teacher, the teacher aides would be trained to work individually with the students under their supervision. The directed learning activities under the direction of the master teacher would be offered on three days of the week--Monday, Wednesday, and Friday. The teacher aides would assist him and help students as needed on an individual basis. Practice sessions under the supervision of the teacher aides would be offered on Tuesday and Thursday. The master teacher would have these days free for instructional planning or other activities.

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A diagram of Plan I* is given below:

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
PERIOD 1 (120 STUDENTS)	DIRECTED LEARNING ACTIVITIES	SUPERVISED PRACTICE	DIRECTED LEARNING ACTIVITIES	SUPERVISED PRACTICE	DIRECTED LEARNING ACTIVITIES
PERIOD 2 (120 STUDENTS)					
PERIOD 3 (120 STUDENTS)					
PERIOD 4 (120 STUDENTS)					
PERIOD 5 (120 STUDENTS)					

The traditional classroom in beginning typewriting usually provides for about 40 students; thus, three teachers teaching five classes a day would be required to provide instruction for 600 students each day. Comparative school-year cost figures might be somewhat as follows:

TRADITIONAL PLAN		
3 TEACHERS X $12,000 =		$36,000
PLAN I--DIFFERENTIATED STAFFING		
1 MASTER TEACHER	$16,000	
3 AIDES ($5 HOUR)	13,500	
		29,500
SAVING		$ 6,500

It is obvious, of course, that initial costs might be higher for Plan I if ideal classroom conditions were to be provided for the large-group instruction. The master teacher would need a television camera and screen. The television camera and screen would be needed so that all students could see the teacher demonstrations, which are such an essential part of skill learning instruction. An adequate voice amplification system would need to be provided. Other teaching aids, such as transparencies, etc., would be helpful.

Another teaching plan might be designed to utilize the talents of a master teacher via closed-circuit television for an entire school system. Under this plan, the number of students who could receive instruction would be limited only by classroom space and availability of typewriters. The instructional program planned by the master teacher could be put on video tape and broadcast at appropriate times. The master teacher could provide special training programs for the teaching associates (or whatever) who would be responsible for supervision of the individual classrooms in the designated school system. The instructional savings under this plan, in the long run, would be even greater than those given for Plan I, although the instructional plan may not be as effective. If a master teacher were not available for the television instruction in a specific school system, video-taped instructional programs prepared by an authority in skill learning in a university school of education, or other institution, might be leased or purchased. The skill learning authority would help each school system design adequate individualized learning packages for its students.

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*1 Master Teacher; 3 Teacher Aides.

Similar plans could be designed for the many other courses that make up the business education curriculum in our secondary schools. The plans could be evaluated and refined yearly so that eventually the best possible teaching-learning package or strategy would evolve, and the talents of the differentiated teaching staff most effectively utilized.

Naturally there are some problems in initiating a differentiated staffing plan, but these do not appear insurmountable. Teacher-training institutions would need to provide the specialized kinds of training needed to develop the varieties of professional and subprofessional personnel needed in the various school systems of this country. In business education, not every teacher-training institution is equipped or staffed to provide the training and education needed by business education teachers. In addition, there would be the natural reluctance of teachers in the field to whole-heartedly accept a differentiated staffing plan. Others might argue that students would indeed become little more than IBM cards under the plan and that there could be a break-down in the important element of student-teacher relationships which seem so crucial in education today. These problems would need careful attention so that they could be solved in a reasonable and rational way. Much research and evaluation remains to be done. Nevertheless, the challenge is ours: Are we ready and willing to make the needed educational changes that would improve educational practice?

REACTIONS TO DR. ALLEN'S PAPER

Elizabeth Kerr*

The introductory portion points out some real problems facing all education today. The paragraph concerning the current model of the teaching world is too true and is well stated. But, it is imperative that "competence" as used in context with this teaching hierarchy be a demonstrated competence and not one assumed to exist because of one's level of educational preparation!

Differential staffing in education would seem to compare with specialization in the medical field where, under the direction of the physician or surgeon, specialists at various levels of preparation and abilities contribute to affecting a "team approach" to planning and implementing total patient care and the welfare of the patient is the focus of concern. The same principle can be applied in education, with the student as the focus. Differentiated staffing would seem to exemplify this approach and is long overdue. Medicine did not arrive at acceptance of this concept overnight nor will education, but hopefully education can move more rapidly with cooperative efforts in established channels of preservice and in-service teacher education. Perhaps these thoughts could be alluded to when Dr. Allen talks about--"use of many talented people who do not wish to accept full responsibility but can yet perform invaluable services."

I particularly like the breakdown into the three areas related to the teaching act, and the discussion related to these. Do presentation or demonstration skills need to be more inclusive to cover planning and evaluation? The statement on performance criteria is well done.

The paragraph on page 20 concerning the whole process of teacher training is indeed a commendable approach but the job of selling this to "traditional" teacher-education instructors will not be an easy one. Hopefully, some will see the light and provide leadership to give direction to this movement.

Possibly there is need for expansion of relationship of differentiated staffing to developing areas of audio-tutorial and computer-assisted instruction activities.

I was encouraged by a recent article, Research and Innovation Urged for Better U. S. Education, taken from a report of the Committee for Economic Development on Education--a non-profit research and policy group which studies major economic issues with the objective of promoting higher employment and stable economic growth. The final paragraph states:

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> ..."As a means of eliminating the regimentation of students that results from conventional class units and 'lock step method of advancement', the committee proposes continued and more extensive experimentation in school organization, including 'the combination of differentiated staffs, team teaching, and variable student grouping, together with the use of instructional television and other audio-visual media.'"

As promoters of this concept swell our ranks, the selling of it will become easier and the effectiveness of it will be realized.

REACTIONS TO DR. ALLEN'S PAPER

Carl Schaefer*

The rhetoric of Allen and Wagschal in their paper "Differential Staffing for Vocational-Technical Education" is both pleasing and discomforting. To think that someone has finally arrived at the notion that teachers are not all alike, and consequently they should not be recognized as such; and one willing to stand up and be counted on this score, is most encouraging. A few years passed such statements would have been heresy.

It is refreshing indeed to read this paper. It's frontal attack on the lack of hierarchy in the educational profession, the stagnation of responsibilities, the lack of status, and menial structure involved in a daily routine is undoubtedly accountable to the lowly prestige of teachers and the diminished effectiveness of the educational process itself. The single salary structure, early tenure and lack of opportunities for advancement, except in the administrative ranks, has also had its role to play in this diminution process.

How wonderful it would be to realize the true concepts of modern day management of entire curriculums and programs--the industrial systems approach applied to the components that when brought together will stand the test, so as to speak, of an approved product called education. This "quality control" aspect of vocational education is only too obviously lacking.

To achieve the fine meshing of all of the oscillating parts as found operating in industry there happens to be about one supervisor for every seven workers; a ratio far from what is found in the educational cloisters of today. The paper, therefore, is advocating more of the managerial types--more quality control; more care with the component parts so there will be less malfunction when the pieces come together for the final test.

The area of trade and industrial education fits the paper's examples rather well. By long tradition, trade and industrial education has used the less than baccalaureate prepared teacher. In actual practice, the trade competent people who are used in T and I are usually placed on a baccalaureate equivalency salary scale when they complete their 40 to 60 credit hour certification requirements and a master's equivalency when they complete their bachelor's degree. In this sense--at least monetarily--the notion of level of teaching competency is engendered.

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Unfortunately this is where it both starts and stops and the real concepts of differentiated responsibility is totally lacking.

This does bring me to the more knotty operational type questions, however. Among these are:

1. How does the proposed staffing differ from that of say a department, chairmanship, curriculum specialist, etc.?
2. Inherent in the proposal appears to be implied ample numbers of teachers in a single area or grouping to form sort of a team. What happens when there is only one teacher or possibly two at most in a given area?
3. The salary differentials are of course attractive. Does this plan save the school money or cost much more than the present budget?
4. Don't we have a form of differential staffing as practiced in New York City and in some of the larger cities where examinations are given for different teacher classification? If so, what benefits have been realized by this method of promotion--indeed if any?
5. Is not the best place to start to bring about this change the inclusion of paraprofessionals (and you name some), so as to assure more in the way of individualized instruction, demonstration and so forth?

I believe a word needs to be said of the in-service dichotomy that the paper alludes to. The continuation of teacher education is a topic that has seen various emphasis throughout recent years. The summer institute program under the various federal legislation is probably the best example. But why hasn't the notion of a 12 month teaching contract with the in-service education as an integrated part of contractual relations been more seriously considered? I know many trade and industrial teachers who would look with favor upon updating experiences in pedagogy and technology if only they were built into the professionalism of the job. It should be obvious to us that a plan enabling a teacher (especially a male) to work twelve months instead of ten is more desirable and makes for more of a professional. Ideally, such an individual could be granted at least a month (usually the eleventh) a year to go back to continue his formal education; the next year stay at school and update his curriculum and materials, and the last year of the cycle return to industry for an extern experience. I know of no other profession that can afford to have its personnel idle for two to three months every year. This is a luxury we can ill afford, but what group besides vocational agriculture follows this sort of practice?

According to a recent study poll taken on the college level, despite all the activist publicity, better teachers and not more student power is the current issue among college students today. A poll at the secondary school level would reveal the same data. How do we make better teachers--it is to this end that the paper we are focusing on holds the greatest promise.

COMMITTEE SUMMARIES

COMMITTEE A-1

COMMITTEE LEADER--ROBERT M. REESE
TASK FORCE RESOURCE PERSON--CARL SCHAEFER
RECORDER--MARY LOU THOMAS

I. Roadblocks to Teaching

- A. Dead end jobs
- B. Advancement is away from students and the classroom
- C. Multitude of non-professional tasks
- D. There is no clear-cut definition of the teaching role position
- E. Salary levels
- F. Persons making decisions
- G. Self-imposed workshops, unpaid meetings and workshops
- H. State and local certification requirements

II. Roadblocks to Differentiated Staffing

- A. Small school units
- B. Single salary schedule
- C. Professional negotiations
- D. Tenure laws
- E. Personnel resistance
- F. Coordination of multiple staff
- G. Public opinion acceptance
- H. Accreditation of schools
- I. Desire of teachers to reach the top
- J. Status

III. Suggested Model for Any Occupational Laboratory

- A. Teacher coordinator
- B. Teacher specialist
- C. Learning skills specialist
- D. Teaching technicians
- E. Supporting specialists
- F. Intern teachers

IV. Division of Responsibilities (Tasks) in Proposed Model

- A. Teacher coordinator
  - Craft committees, curriculum development, scheduling (program and staff), student selection, identification and scheduling of community resources, public relations
- B. Teacher specialist
  - Teaching determining nature of assignments
- C. Teaching technicians (para-professional)

    Assist in teaching situation, set up demonstrations

- D. Supporting specialists
    Inventory supply and control, equipment adjustment and maintenance, security, safety, preparation of visual materials, inspection of work, preparation of laboratory instruction materials

V. What can teacher educators do to get things going?

- A. Involve vocational centers in reviewing differentiated staffing
- B. Arouse interest in differentiated staffing at state and local levels
- C. Alert teacher education staffs to differentiated staffing

COMMITTEE A-2

COMMITTEE LEADER--RICHARD H. WILSON
TASK FORCE RESOURCE PERSON--L. O. ANDREWS
RECORDER--ROBERT MEISNER

I. The Teacher Education Role

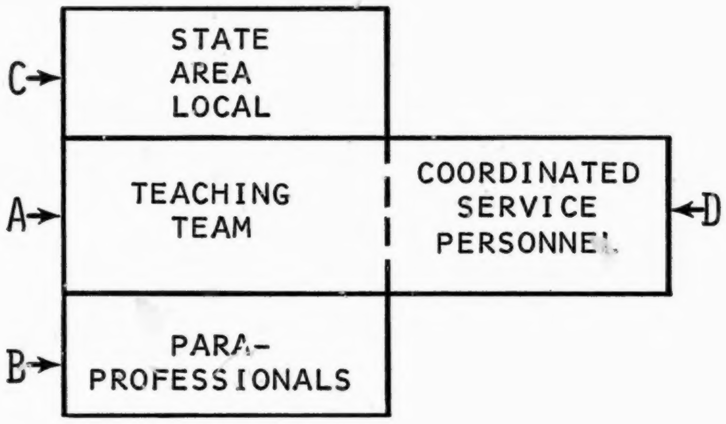
- A. Preservice
  Preparation in preservice curriculum to develop abilities
  - a. to plan for involvement of persons, teacher aides and associates
  - b. to aid the "resource teacher", "teacher aide", etc. in the planning of strategy for teaching a lesson
  - c. to determine the kinds of personnel needed for teaching assistance
  - d. to help assisting personnel to recognize, inventory and plan for appropriate learning experiences
- B. In-service education for fully certified teachers
  - 1. Graduate level course of differentiated staffing
  - 2. Area workshops for teachers of all vocational services
- C. A definition of performance criteria would be needed for each differentiated role
- D. Preparation of teacher aides
  - 1. Two year technical institutes develop programs to prepare teacher aides
  - 2. Universities develop two year programs for teacher aides
- E. The teacher aide
  - 1. Educational specialist to prepare materials
  - 2. Technical specialists to instruct
  - 3. Specialists to care for school facilities

II. State Level Programming for Differentiated Staffing

- A. What kind of assistance do we need and who
  - 1. Local advisory committees
  - 2. Industry
- B. Developing an action program
  - 1. Define differentiated staffing
  - 2. Funding as a sparkplug
  - 3. Encourage innovative high school administrators to establish pilot programs
  - 4. Educate state staff
  - 5. Seek changes in state plans and policies to implement improvements

6. Set up models in state departments and universities
7. Expand internship for administrators
8. Involve teachers in formulation of definitions of roles and functions

III. Models for Differentiated Staffing in Vocational Education


STATE
AREA
LOCAL
C
TEACHING
TEAM
A
COORDINATED
SERVICE
PERSONNEL
D
PARA-
PROFESSIONALS
B

A. Hierarchy of teacher levels including:
    1. Specialist (instructional team or leaders)
    2. Professional teacher
    3. Associate and/or assistant
    4. Intern
B. Paraprofessionals
    1. Technicians
        a. shop, lab management
        b. media
        c. instructional materials preparation
    2. Aides
        a. shop-lab maintenance or housekeeping
        b. inventory control
        c. procurement
        d. equipment maintenance
C. State, local, area (depending upon geography)
    1. Supervision
    2. Administration
    3. Coordination
D. Coordinated Service Personnel
    1. Curriculum
    2. Teaching materials
    3. Evaluation
    4. Guidance
    5. Etc.

COMMITTEE A-3

COMMITTEE LEADER--JOSEPH ARNOLD
TASK FORCE RESOURCE PERSON--DWIGHT ALLEN
RECORDER--JOHN GUNSON

I. The description of the functions of each of the levels of teachers in a differentiated staffing pattern for vocational education was of prime concern. The committee divided into two groups to discuss the functions. Summary of discussions:

   A. Both sub-groups concentrated on discussion of the top level--the Master Teacher, and on the fourth level--the Teacher Aide.
   B. The groups were split on defining the function of the Master Teacher. While some assumed he needed some scheduled classroom contact to be called a master teacher, others decided such functions as interpreting research and giving direction to the curriculum constituted full-time involvement, allowing no time for function in the classroom.
   C. Use of paraprofessionals was discussed with the conclusion that a variety of abilities and qualifications can be utilized. Clerical assistants, technical laboratory supervisors, demonstration assistants, and other positions need consideration for development of specialized paraprofessional training. It was recognized that a number of institutions now employ paraprofessionals, but acceptance by administrators and teachers is far from universal. Clear definitions of function are needed to gain the support of professional associations and/or contract negotiation groups.

II. Discussion points with implications for vocational teacher education are:

   A. Present staffing patterns in vocational education are already differentiated, perhaps more so than in any other area of education. This is true in university teacher education programs as well as in high schools and post high school institutions.
   B. Teacher education programs for preparing "differentiated staff" must be developed concurrently and in cooperation with the implementation of differentiated staff arrangements in occupational programs and institutions. Short and long range pre- and in-service teacher education programs must be initiated and developed as adjuncts to the occupational programs in need of teachers.
   Some teacher educators in the group felt they could not obtain usuable content from the seminar sessions,

particularly because teacher education programs cannot be designed independent of and prior to the development of a differentiated staffing plan for trial in a high school or other institution offering occupational programs.

C. There was a strong concern that vocational education must adapt and evolve toward more highly differentiated staffing arrangements rather than erase or destroy present staffing patterns as a prerequisite to establishment of new staffing plans.

D. Small schools will not be able to utilize differentiated staffing within the framework suggested in the task force paper; e.g.: the Master Teacher (as tentatively defined) would have to function across several schools or school districts. How is his function then really different from that of certain state and other consultants and supervisors?

III. Members of the group indicated support for differentiated staffing as a concept with definite applicability and value in vocational education, but complete analysis of existing staffing structures must precede and exert a strong influence on any revision of staffing patterns. Attempts to merely superimpose a model should be avoided.

COMMITTEE A-4

COMMITTEE LEADER--HERSCHEL LESTER
TASK FORCE RESOURCE PERSON--ELIZABETH KERR

I. Some of the problems and questions identified and discussed are as follows:

- A. Are special teacher competencies developed through preservice or in-service programs?
  This is an area for progressive schools, industry, and teachers' colleges to assist school officials in upgrading their staffs.
- B. Does a teacher have to serve as a "teacher aide" before he can become a "professional" teacher?
  This would be advisable even though we have practice teaching as a pre-requisite. However, a strict time limitation of more than one year should not be imposed on a person of outstanding ability.
- C. Can teacher aides be prepared by technical institutes?
  Definitely, progress in technical areas is so rapid that persons that have been trained in technical institutes are much more "knowledgeable" in specific areas than a master teacher.

  e.g. computerized drafting
  solid state physics
  hydraulic and fluid applications

II. Some differentiated staffing plans suggested by the committee are:

- A. Master teachers
  - Senior teacher (respective technologies)
  - Para-professional (associate level teaching)
  - Interns (in rotation)
  - Clerical (permanent)
- B. Professional teacher
  - Intern
  - Teacher aide
  - Clerical assistant
- C. Teacher
  - Intern
  - Aides--three levels of aides
- D. Master teacher
  - Vocational instructor
  - Teacher aide
  - Clerical assistants (community volunteers)

COMMITTEE A-5

COMMITTEE LEADER--JULIA DALRYMPLE
TASK FORCE RESOURCE PERSON--MAJORIE EAST
RECORDER--MISS MARION BROWN

DIFFERENTIATED STAFFING TERMINOLOGY AND RESPONSIBILITIES

Overall Vocational-Technical Program Coordinator

Responsibilities: Coordinating vocational technical programs, studies, interdisciplinary matters; supervising staff; chairing advisory committees.

Master Teacher (Instruction Specialist)

Responsibilities: Coordinating teaching and teaching strategies, developing curriculum, diagnosing needs, preparing staff, coordinating community contacts, staffing classroom teaching, coordinating technology and materials, promoting staff relationships.

Senior Teacher (Professional Teacher)

Responsibilities: Teaching large groups, conducting in-service training of staff and associate teachers, supervising student teachers, assessing curriculum needs.

Staff Teacher (Provisional Teacher)

Responsibilities: Serving as classroom resource person, teaching small groups and individuals, making home contacts.

Teacher Aide

Responsibilities: Producing teaching materials, assisting in laboratory, assisting study groups, keeping attendance records, doing routine tasks.

Clerical and Instructional Materials Assistants

SUGGESTED PLAN FOR PREPARATION OF DIFFERENTIATED STAFF PERSONNEL

I. Overall Vocational-Technical Program Coordinator

    A. Essential knowledge
        1. Administration
            a. Personnel (selection, promotion, termination)

        - b. Facilities
        - c. Budget and finance
    - 2. Supervision
      Teachers (Master teachers)
    - 3. Research program development and evaluation
    - 4. Broad general education background
    - 5. Philosophy and organization of vocational-technical programs
    - 6. Specific vocational-technical area
  - B. Place of preparation
    - 1. Graduate school, perhaps industry
    - 2. Minimum of three years teaching experience
  - C. Level of preparation
    - 1. Holder of Bachelors Degree
    - 2. Single and or multiple degree persons

II. Master Teacher

  - A. Essential knowledge
    - 1. Subject matter or technical competence
      - a. Research methodology and implementation of research findings
      - b. Curriculum planning, development and implementation
      - c. Evaluation of instruction
      - d. Mastery of specialized subject matter fields
      - e. Theory of educational learning
      - f. Advanced knowledge in related disciplines
      - g. Philosophy of education, vocational education and subject matter field
    - 2. Presentation and demonstration skills
      - a. Methods of teaching and ability to demonstrate effectively
      - b. Use of educational media
      - c. Ability to train teachers and staff members
    - 3. Professional decision-making and human relations skills
      - a. Group discussions
      - b. Educational administration
      - c. Supervision techniques
      - d. Diagnosis of learning and teaching problems
      - e. Establishment of priorities
      - f. Work with advisory committees
  - B. Place of preparation
    - 1. College
    - 2. Graduate study
    - 3. National and local professional groups
    - 4. Seminars
  - C. Time of preparation
    - 1. Preservice
    - 2. In-service
    - 3. Continuous professional study and growth
  - D. Level of preparation
    At least one year beyond Master's level

III. Senior Teacher

- A. Essential knowledge and competence
  1. Competence as a subject matter specialist
  2. Knowledge and awareness of related disciplines
  3. Ability to perform and function with a high degree of professionalism
  4. Knowledge of principles and theories of learning
  5. Understanding of and ability to assess needs of students, community, industry, business, etc., and relate these needs to curriculum and instruction
  6. Knowledge of educational technology
  7. Knowledge of human growth and development
  8. Functioning knowledge of good human relationships
  9. Sound basic knowledge of the operational concerns and directions of classroom management
  10. Skill in public relations
  11. Ability to plan and initiate learning experiences which provide sound bases for the development of concepts and generalizations by students
  12. Ability as a sounding board for associate staff, student teachers, and others
  13. Comprehension of supervisory concepts
  14. Skill in communications
  15. Ability to make pertinent value judgments
  16. Knowledge of principles of curriculum development
  17. Depth in knowledge and application of content, materials, and methodology
- B. Time and place of preparation
  1. Preservice experiences (college level)
  2. In-service training
  3. On-the-job experiences
- C. Level of preparation
  1. Minimum of the baccalaureate degree
  2. Experience gained working up from the rank of Staff teacher
  3. Knowledge of the "World of Work"
  4. In-depth knowledge of area of specialization

IV. Staff Teacher

- A. Essential knowledge
  1. Subject matter content
  2. Organization and use of instructional materials
  3. Teaching techniques
  4. Classroom organization and management
  5. Understanding of students
  6. Philosophy of vocational education
  7. Course construction
  8. Media use, selection, development
  9. Communications
  10. Student selection, placement, and follow-up
  11. Coordination and supervision of student projects or work experiences
- B. Place of preparation
  1. Industry
  2. Junior college or private school
  3. Four-year college
  4. Combination of above

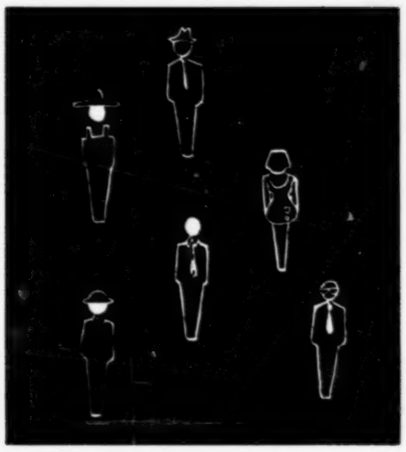
C. Time of preparation
    1. In-service
    2. Preservice
D. Level of preparation
    1. Undergraduate
    2. Graduate

V. Associate Teacher

A. Essential knowledge and competencies
    1. High level of cognitive knowledge and skill in a specific occupational area or module within occupational area
    2. Basic skills in carrying our instructional activities with emphasis on specific demonstrations and individually assisting small groups or individual students engaged in classroom instruction and laboratory activities
    3. Skill in working with others as part of an instructional team
B. Place of preparation
    1. Previous training and current work experience in occupational area or for development of occupational competencies
    2. Short term college program emphasizing instructional techniques and developing cooperative instructional approaches
C. Time of preparation
    1. Preservice
    2. In-service
D. Level of preparation
    No degree in education, however, professional training could be applied toward a degree at later date

VI. Teacher Aide

A. Essential knowledge and competence
    1. Housekeeping ability
    2. Knowledge of routines and procedures
    3. Ability to carry out responsibilities
    4. Ability to follow instructions
    5. Skill in communication with students
    6. Understanding of job safety
    7. Willingness to be a part of a team
    8. Pride and professionalism on the job
    9. Production of teaching materials
    10. Skill in use of equipment
B. Time and place of preparation
    1. In-service training
    2. Institutes



VOCATIONAL-TECHNICAL EDUCATION FOR THE DISADVANTAGED

TASK FORCE PAPER
TASK FORCE MEMBERS' REACTIONS
COMMITTEE SUMMARIES

88/89

VOCATIONAL-TECHNICAL EDUCATION FOR THE DISADVANTAGED

EDMUND W. GORDON, *Chairman*
Department of Guidance
Teachers College, Columbia University

TASK FORCE MEMBERS:

FLOSSIE BYRD, *Dean,*
School of Home Economics
Prairie View A & M College

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MARVIN HIRSHFELD, *Chairman*
Department of Distributive Education
Temple University

LLOYD PHIPPS, *Professor and Chairman*
Division of Agricultural Education
University of Illinois

MAMIE SIZEMORE, *Indian Education Consultant*
Arizona State Department of Education

90/71

VOCATIONAL-TECHNICAL EDUCATION FOR THE DISADVANTAGED

Few problems in education have commanded more expressed concern and organizational attention then has the improvement of education for socially disadvantaged children and youth. Similarly few problems in education have proved more elusive of solution under the impact of such widespread effort. That vocational educators should also be concerned with these problems is not unexpected given the history of high representation of socially disadvantaged children in vocational education classes and schools. That vocational and technical educators should be no less stumped by the problem than are other educators may be unexpected in some quarters, just because of that long history. But the history of education is replete with examples of the great distance between mere confrontation between elements of a problem and adequate solution. If education in general has not found answers to the educational problems of the disadvantaged, it may be too much to expect that vocational education should or for that matter can. What is it that we seek to do for children--disadvantaged or privileged--through vocational education?

Goals and Purposes of Vocational Education

Traditionally it has been the goal of vocational education to develop in the student those skills, abilities, understandings, work habits, and appreciations which are needed by workers to enter and make progress in employment on a useful and productive basis. It has been the purpose of vocational education to prepare the student for employment or progression in a specific occupation. The definitional literature of this field has sought to separate it from general education which has as its purposes the broadening of the student as an end in itself or as preparation for professional training. Vocational education has also been distinguished from industrial arts education which is designed to educate students to live more effectively in a world which is influenced by industry and technology. These goals and purposes have never functioned exclusively for their respective areas of education. There has been some degree of overlap. However, vocational education has sometimes been limited to those forms of education which qualify for special aid under the national vocational education acts. Under this influence it has tended to be particularly oriented toward preparation for specific occupations.

Certain developments which are culminating in the latter half of this century are forcing some degree of confluence among the goals and purposes of general education, industrial arts and vocational education. The goals and purposes of all education have been significantly influenced by three revolutionary developments in western societies. The first of these is an explosion in the quantity of information and knowledge available to man. Not only is there more information, more easily available, it also is subject to change or reinterpretation more quickly than in the past. It is also likely to influence economic, political and social decision making more quickly than in the past. It is no longer possible for an individual to be master of all information and knowledge available on a given subject. In addition, with this expansion of knowledge, the distinctions between disciplines are less clear. The relativity and interrelatedness of knowledge is more obvious, thus extending the breadth of the basic knowledge required to function adequately in any one area.

A second development which is pregnant with potential for change in the goals of education involves the massive increments in our technological competence. The industrial revolution combined the power of the machine with the skill of man, and significantly expanded the number of occupations and specific skills for which workers were required. The growth and expansion of vocational education is in large measure a by-product of that revolution. Today we are embarked upon a new era--the cybernetic era--in which the skill of the machine is added to the power of the machine. Its principles of organization and its implications are as different from those of the industrial era as those of the industrial era were from those of the agricultural era. The combination of the computer and the automated self-regulating machine can result in a system of almost unlimited productive capacity, which unlike the mechanical systems which preceded it, will require progressively less rather than more human labor. It may also require more general and less specific human abilities and skills. Cybernation will force the reorganization of our economic, educational and social structures to meet its own and our new requirements.

The third change consists of significant shifts in the economic, political and social balance of power which have occurred over the past three decades. The eruption of the civil rights-human rights movement at home, the rise of new and underdeveloped nations abroad, and the development of new forms of military weaponry that have greatly limited and have the potential for eliminating war as a method of settling international conflicts. Not only do these shifts have the potential for changing the social order and changing the goals of education, they also will change what is learned and the way young people develop in their non-school environments.

These developments have serious implications for education. To enable our educational efforts to match the demands of these changed and rapidly changing situations, we must give attention to the tasks of remodeling some of the basic concepts and structures of education. The school of the future must not only be more appropriately aligned with the needs of that emerging social order, it will also need to be a positive force in facilitating our transition into that order.

Probably the most significant change or at least one with serious implications for education will be the change that requires the school to shift away from the emphasis on rewards for those students who succeed. The emphasis will have to be placed instead on the school's responsibility for *insuring success* in academic, emotional and social learning for *all students* save for that three to five percent who are truly mentally defective. The future will also demand of us that we abandon our focus on more and more content and specialized skill mastery. We will need to substitute for them a primary focus on learning to learn as a life-long continuous process. The vast amount of knowledge available to man, together with the demands of the advanced technology by which our society moves, will require of student-future citizens a high degree of communicative skill, skill in the seeking and management of information, and competence in the transfer of knowledge and skills to new situations. Similarly, changes in the politico-social sphere will make more necessary than ever before competence and skill in intrapersonal management and interpersonal relationships. The task of education, be it general or vocational, will be to provide preparation to insure our students ability not only to make a decent living but also to live a meaningful life.

The rapid expansion of the service and management industries, the automation and cybernation of production and the advancing complexities of cultural and political life make it necessary for vocational education to move rapidly in the direction of the goals we have traditionally projected for education in general. Vocational education must be built upon a foundation of adequate communication skills. Education for employability is meaningless in the absence of attitudes receptive to and capacity for continued learning and retraining. Employment in the service and management areas will be greatly limited if not unavailable without information management skills. Personnel managers are more and more turning to tests of personality and personal attributes in employee selection. Are not initiative, creativity, self-expression, self-management and interpersonal relations the key areas of concern in so many of these tests?

Industry is less and less requiring that beginners enter with specific skills. Yet these goals which have been advanced can be taught through the learning of certain content and specific skills. The learning of subject matter and job skills need not be the *ends* or *goals* of education. They may be more appropriately regarded as the *means* of education. It should be the goals of vocational education to develop in the student, through the study of that content and those skills related to a family of work, the abilities, understanding, attitudes, work habits and appreciations which are needed by a human being to live a meaningful life and to make a productive contribution to the society in which he lives. Certainly brick masonry can be taught as a skill. It can also be taught as an art, but it should be taught as a form of human expression through which a more experienced human being shares with a less experienced human being a part of what he is and some of what he knows about living a humane life. That he may be able to use brick masonry to get a job and feed his family may be an important consideration today. It may be an irrelevant consideration tomorrow. In neither time slot is it in my view the critical consideration.

Characteristics of Disadvantaged Youth

Although the literature on the disadvantaged is extensive, we are not yet able to draw from that literature definitive guidelines for educational planning for this population. We are able to identify characteristics frequently encountered, but are shy about interpreting these characteristics and their implications for educational intervention. This may be due, in part, to the fact that the problems of underdevelopment and educational handicaps in the disadvantaged have not been appropriately conceptualized. The great majority of investigators who have worked in this field have viewed the disadvantaged as a great homogeneous mass. Insufficient attention has been given to the wide variety of persons, conditions, problems and potential assets which are represented by this all too popular euphemism "the disadvantaged."

The term socially disadvantaged refers to a group of populations which differ from each other in a number of ways but have in common such characteristics as low economic status, low social status, low educational achievement, tenuous or no employment, limited participation in community organizations and limited ready potential for upward mobility. Variously referred to as the "culturally deprived," the "socio-economically deprived," the "chronically poor," the "poverty stricken," the "culturally alienated," and so on, these are young people who are handicapped by depressed social and economic status and, in too many instances, are further handicapped by ethnic and cultural caste status. For a number of interrelated reasons, more and more of these families are coming to be concentrated in urban and rural slums, hearts of our great metropolitan centers. They are predominantly Negro, Puerto Rican, Mexican, American Indian, southern rural or mountain white, these people are the bearers of attitudes sometimes alien to those dominant in the broader community, and their children come to the school disadvantaged to the degree that their conditions of life have failed to provide them with the experiences "normal" to the kinds of children the schools are accustomed to teaching. As consequence, these children show in school disproportionately high rates of social maladjustment, behavioral disturbance, physical disability, academic retardation and mental subnormality.

Approaching this population and the literature related to it as an education challenge rather than as a political problem one is led to a three unit conceptual model for approaching the pedagogical tasks involved. The teaching-learning process for any learner involved:

1. The nature, quality and functional patterning of basic cognitive processes (sensation, perception, cognition, association, generalization, memory, thinking or problem solving, information processing).

2. The nature, quality and functional patterning of affective mechanism (attitude, aspiration, motivation, involvement, receptor readiness and preference, set, temperment).

3. The nature, quality and functional patterning of achievement systems (skills mastery, content mastery, informational and behavioral repertoire acquisition).

Although the literature treats aspects of this model, what is missing is systematic attention to the three aspects or units in their dialectical relationship to each other.

- Some of these children have problems because their basic cognitive processes are defective or disordered.
- Some of these youngsters have major disturbances in affect or their affective behavior may be guided by the beat of another drummer.
- Some of these youngsters simply have deficiencies in the mastery of basic skills.
- Still others suffer from significant information gaps--certain content is not in their information pool.

But these developmental learning disturbances do not operate unilaterally. They interact, interpenetrate and overlap. Additionally, temporal and sequential ordering and disordering combine to further complicate the picture. Thus, when we try to look at intelligence or personality or achievement factors--as is typical of much of the literature--we get findings that are frequently contradictory or at least are inconsistent and relatively meaningless as guides to educational planning.

What does it mean when we say that we know a great deal about the intellectual status of disadvantaged children? It simply means that we know that children from socially disadvantaged backgrounds tend to make lower scores on standard tests of intelligence than do children from more privileged backgrounds. Since we know that these tests tend to correlate with success in school, those children with lower scores are likely to do poorly in school.

Available research in this area permits the description of certain measured levels of function in comparison to some reference group, but it does not permit us to understand the processes involved. Indeed, there is even some evidence to suggest that the descriptions of levels of function are misleading since they may be too narrowly drawn.

However, what is emerging from the careful analysis of this research is the clear impression that static measures of function or status are inadequate in dealing with disadvantaged children. What is needed is appraisal procedures which permit us to get at process-mechanism-interactions, for it is out of process analysis and interactional studies that we are more likely to get meaningful leads for intervention.

It is interesting that although we have less research related to the affective development and behavior of the disadvantaged, the literature seems somewhat clearer. It may be the result of the fact that we have been forced to describe rather than quantify, and in the absence of precision or allegedly accurate measures we have been less prone to make predictions and take recalcitrant positions. Zigler, in discussing the triadic model for getting at the learning problems of the disadvantaged, has suggested that the affective area involving attitudes and motivations may not only be more plastic and amenable to modification than cognitive processes or achievement systems but the affective area may indeed be more crucial. He takes the position that shifts in quality of function may be more a function of attitude toward the task, motivation and task involvement than difference in cognitive function.

The literature on affective development indicates that many of the children with whom we are concerned show a marked lack of involvement with, attention to and concentration on the content of their academic experiences. There are few academic tasks which commit them to deep involvement. Their work habits are frequently insufficiently developed. Because of the high interest demands of nonacademic experiences, they are limited in their ability to inhibit responses to those stimuli which are extraneous to academic learning and to disinhibit responses which are pertinent to academic learning.

As important as attitudes toward school and learning may be, it is in the area of attitude toward self and others that the crucial determinants of achievement and upward mobility may lie, and it is in these areas that our data are least clear. It has been observed by some that disadvantaged children show affinity for in-group members and demonstrate a sense of distance from or even hostility toward representatives of out-groups, whether in peer or non-peer relationships. In contrast, other observers have noted the high degree of respect and awe in which these children hold selected out-group status persons or idealized models. Tendencies toward self-depreciation and depressed self-concepts have been noted by several observers. It is around these attitudes toward self that the rapidly changing national and world situations involving underdeveloped peoples are likely to be most influential, and it is difficult to predict the ultimate effect of these altered situations on self-perception and behavioral change. Our knowledge and even our researchable hunches are as yet limited. But it is around these changing situations that the school may yet find a fulcrum on which to lever up motivation, aspiration and involvement. There is growing empirical evidence to support the view that young people actively associated with the current civil rights struggle draw from their involvement in that effort a new source of motivation and an enhanced view of themselves. The impression is gained that such experiences are reflected in greater application of effort to and greater achievement in academic endeavors. The evidence for such improvement is less clear, yet there can be little doubt that attitudes toward self and toward the environment in relation to self are crucial variables in academic as well as social and emotional learning situations. In fact, one of the strongest findings coming out of the Coleman data indicates that attitudes of environmental control exercise a powerful influence on academic achievement second only to family background.

In approaching education for disadvantaged young people we are then confronted with several factors which may influence what we do. Our target population is one

- which has a history of academic and intellectual functional levels which are lower than those observed in more privileged segments of the general population;

  which shows a higher incidence of learning disabilities than the general population;

- which may be more significantly influenced by variations in individual stylistic and temperamental aspects of learning behaviors;

- in which the hierarchy of behavior reinforcers may differ significantly from those educators are accustomed to using; and

- for which the most critical levers for upgrading educational achievement may be outside the domain of formal education.

Viewing the population in this way, what are the most pressing requirements of an educational program designed to meet the needs implicit therein.

Any program designed for this population must address the problems of more efficient learning behaviors and more appropriate learning experiences. The fact that intellectual function is low[1] in relation to some other student populations is neither an adequate explanation nor excuse for the school's failure to bring these students to an adequate level of academic achievement. This long history of low level academic achievement requires of us that ways be found to improve the intellectual and academic performance of these children, both through changing their behavior in learning situations and through changing the learning situation.

In the former, there is increasing evidence to suggest that basic cognitive processes (symbolization, abstraction, generalization, integration) may not be as plastic as some of us have been encouraged to hope. It appears that learning sets, cognitive styles, response tendencies are recalcitrant to change. However, these learning behaviors need not be handicaps to learning. Some are obviously more facilitative in some learning situations than are others, but under appropriate conditions of motivation they may prove quite adequate to most learning tasks. It may be easier to change the attitude and level of motivation involved in the specific learning situation. If this possibility is to be pursued, one of the central tasks of education is to find ways of establishing more appropriate marriages between the learner's motivational system and the learning task and goal. In studies of learning in mildly retarded subjects Zigler reports that shifts in achievement and intelligence test scores can almost entirely be accounted for on the basis of shifts in task involvement or level of effort (both are manifestation of motivation). He reports no significant shift in the character of cognitive function. More systematic study of this phenomenon may reveal that cognitive processes are in fact changed but not so much as a result of a direct attack upon these processes but as by-products of changes in affect--changes in attitudinal and motivational factors. Thus it appears that any sustained effort at developing more efficient learning behaviors might well begin with a realignment of affective relationships particularly with respect to motivation. The reader is cautioned against a traditional or colloquial interpretation of motivation. The point here is not that "these students must be properly motivated." Rather reference is made to the more effective use of intrinsic motivation--elements of the motivational system which can be identified and tapped from within the individual. J. McV. Hunt has developed this position which emphasizes the tendency of all animal life to be attracted by those environmental factors which are modest extensions of prior experiences rather than being gross extensions of them, incongruent with or contradictory to them. The student is more likely to continue to be or to become significantly involved if he recognizes in the present learning experience some meaningful tie or bridge to prior satisfying or productive experiences. Motivation is enhanced and sustained when there is free and easy movement from one level to the next level of difficulty or from one category to another category of learning based upon the congruence between them. For disadvantaged students who so often have been "turned off" by their formal learning experiences, there may be no more critically needed adjustment in educational programs for them.

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[1] The fact of relatively low intellectual function must not be confused with allegations of low intellectual potential. The former is an established fact when the criterion measure is academic or standard test achievement. The question of potential or "basicability" is the subject of unresolved controversy (see Anastasi, Fishman, Gordon, Hunt, Jensen, Katz, Schwebel and others who have concerned themselves with this subject in their research or writing).

The content and conditions of vocational education provide excellent opportunities for the improvement of learning efficiency through changes in our utilization of motivation and other aspects of affective behavior. Among these are the opportunities to utilize as instructors and models persons indigenous to the target community or population; to utilize as the content of instruction material drawn from the familiar environment of the student; to relate learning tasks to income production and social participation; to reduce complex technical processes to component units which can be programmed to reflect the rate and related abilities of the learner; to reduce material which has been packaged in abstract form to less abstract and more concrete formats which may be more familiar; and opportunities to actively relate the worlds of learning, work and politico-social interaction.

The high priority given to utilizing the social, emotional, motivational domain to increase learning efficiency in disadvantaged students must not be used as an excuse for failing to change the nature and quality of directed learning or instruction. The facts that many of these students have developed generalized and specific learning disabilities and do not have access to the family or community resources which might help them to compensate for these handicaps, make it imperative that the school develop compensating experiences. The fact that stylistic differences in function may constitute handicaps to learning in the absence of instructional programs which support or complement them leads obviously to the conclusion that instructional materials and procedures must reflect learner characteristics.

The long tradition of quantitative appraisal for classification, selection and prediction have made us less ready than we should be for qualitative assessment for purposes of prescribing the specific qualities of the learning experience of a particular student. Group appraisal, group prediction and group planning have respectable positions in the history of education, but the challenge of adequate education for disadvantaged student pushes us to a higher level of concern with individualization in instructional design and implementation. To move in this direction we must begin with a detailed qualitative appraisal of the learning behaviors and living environments to determine level of function, nature of the repertoire of adaptive behaviors, strengths and weaknesses in learning achievement, predominant reaction patterns reflecting affective and cognitive styles and temperament, all to be used as a basis for the development of a prescription for educational intervention. The evolving prescription may suit the needs of several students or it may be appropriate only to the idiosyncratic needs of a single student. Its validity, however, cannot be determined by the generalizability of its application but by its utility in the educational development of the specific child for whom it was generated.

In work with young people in whom economic deprivation, socially negative discrimination, social disorganization and educational neglect have produced exaggerated reaction tendencies which distort both affective and cognitive interactions, special attention will need to be given to understanding and redirecting behaviors which may be self defeating of academic success but essential elements of their current social coping behavior. Reference is made to the tendency in many of these young people to delay or deny their responses out of lack of confidence in their abilities of lack of faith in the environment's readiness to accept them even if they are correct. The delayed response is sometimes a play for time while waiting for environmental or or authority based clues with respect to what is expected of them or what is the correct response. Similarly, in exaggerated efforts at pleasing or in defensive efforts at avoiding the anxiety of deliberation, the too rapid, ill considered reaction may be equally self defeating. Casually viewed these reactions may be mistaken as manifestations of low motivation or low level task involvement or mere stupidity all of which interpretations would simply lead to further academic failure.

Motivation and task involvement are related to the effectiveness of behavioral reinforcers. We know that those behaviors which are appropriately reinforced tend to reoccur and that involvement in those tasks is high. The existence of differential hierarchies of reinforcers for disadvantaged and more privileged students requires that we recognize that we have grown accustomed to authority determined rewards and too often ignore the reward or reinforcement preferences of the respondent. There may be something about cultural differences and economic deprivation which lead to a different ordering of priorities with respect to the features of the environment which are reinforcing. If you are listening to the wrong music, you may think the dancers are out of step. The mere fact that the school considers that grades or alleged employment opportunity or job security or even teacher praise are appropriate reinforcers may have little to do with what really "turns Mary on" or what would draw Roger back into a formal learning situation. The need then that we be more sensitive to differences in rank ordering or preferences for reinforcers or rewards is compelling.

Educators have good reason to be concerned, sensitive and even to feel guilty about the extent to which we have failed in our efforts at educating the under-privileged. The fact is we have done a lousy job and despite all our breast beating, agitation and action, we haven't done much to improve our past performance. After reviewing a good bit of what is offered as compensatory education, I have been forced to conclude that we have provided little compensation. We have met with little success. The quantity of effort has been substantial but the quality leaves much to be hoped for. However, we would be mistaken if we were to conclude that the need is only for the school to change or improve. Certainly it must improve in many areas in ways that we are able to specify as well as in ways which are presently unrecognized. But there is a larger arena in which the school and the disadvantaged function or malfunction, that is a community--a social system which may confront the school and these students with problems which are beyond their competencies to overcome. To improve their education it may be necessary to modify that social system, so that the negatives in their characteristics may be corrected or produced in lesser abundance, and their other characteristics may be more appropriately utilized in their development. It has been noted that "The democratic problem in education is not primarily a problem of training children; it is a problem of making a community in which children cannot help growing up to be democratic, intelligent, disciplined to freedom, reverent to the goods of life--eager to share in the tasks of the age. A school cannot produce this result; nothing but a community can do so."

Characteristics Deemed Important in Teachers of Disadvantaged Students

Emphasis has been given to the need to improve learning efficiency in students and teaching efficiency among instructors. For students, better utilization of the affective domain, particularly intrinsic motivation has been stressed. For teachers, qualitative behavioral analysis leading to individually prescribed instruction, has been emphasized. When we begin to talk about qualitative analyses of behavior, individualized prescriptions for learning and customized learning experiences we are also talking about an approach to pedagogy which requires a considerably higher degree of professional specialization than that currently practiced. As teachers we have seldom been called upon to really teach. Too many of us confuse mere pedantry with teaching. The former requires that we know a good bit about our instructional material. The latter requires that we know a great deal about our students and even more about how we use ourselves and our resources to make our knowledge and experience a part of the effective adaptive repertoire of those persons we teach.

To achieve this level of professional specialization and competence, teachers of disadvantaged students will need to be masters of the content which is to be taught. Even if content mastery loses its pre-eminent position in academic endeavours and we focus more sharply on the seeking and management of knowledge, even these skills are likely to be better taught by persons who know something well. For children who have problems in learning, the teachers ability to move freely with his information and package it in a variety of ways and relate it to a variety of problems and circumstances is likely to be more effective.

Equal importance attaches to skill in the use of self in human interactions. One thing that most of us agree on is the difficulty of work with many children in depressed areas. The demands on the teacher are very great. The requirements for understanding, for compassion, for empathy, for support, for acceptance, for flexibility, for strength, for warmth would seem to require the super human being. In the variety of situations the teacher is called upon to master, mastery of self would seem to be an essential trait. The successful teacher regardless of style appears to be the person who in the eyes of the student can emerge as a significant adult who can be trusted and relied upon, and from whom the children can perceive a sense of high expectation. The dynamics are not completely understood but evidence for what is coming to be known as the Rosenthal Effect is convincing. Here we refer to the finding that student achievement may be significantly influenced by the level of expectation held for the student by the teacher. Where teacher expectations are high, achievement is high. Where little is expected, achievement is low. These and other findings suggest that the over-riding requirement of teachers of disadvantaged students is for an attitudinal commitment to the expectation that these students can learn and that the teacher can create the necessary conditions for their effective learning. The teacher as a significant person who can be respected as a person and from whom the student can perceive respect and high expectations may be the most important factor the school can bring to bear on the education of disadvantaged, or for that matter, any students.

There are several additional characteristics which would seem to be desirable in teachers of disadvantaged children. In the Gordon and Wilkerson text we called attention to the fact that much has been made of the need that teachers understand and appreciate the cultural background and life conditions of the students they teach. This position was questioned. It is conceded that it may be important that the people who are going to teach these students know something of the environment from which they have come and have appreciation for the problems which confront these young people. However, the evidence is not convincing that effective teaching comes necessarily from understanding the life conditions of the person who is being taught. Successful teaching is more likely to develop from successful work with these students. Teachers need to be helped to find procedures, approaches, techniques which make them better able to achieve some success with unproductive learners. When teachers have such resources, we tend to be more successful in getting them involved in new and different ways with the teaching-learning process. When efforts do not meet with some success, when students are failing and teachers are failing, it is easy for the teacher to be discouraged, disinterested and apathetic. Under these conditions knowledge of the students' life conditions comes to be used as an excuse for the failure or as social gossip to partially assuage the teacher's guilt. When some success is experienced positive attitudes, higher expectations and enthusiasm are likely to follow and knowledge of the pupil becomes a constructive tool.

Among those procedures, approaches and techniques a few command our attention.

1. Educators have recently come to recognize that there is a social psychology of education and learning. Among the many relevant contributions of this field are the concepts and techniques of group dynamics. Teachers of disadvantaged children need to be taught how to utilize the dynamics of intragroup interaction to influence and direct learning and behavioral change. The proper management of these interactions may be a crucial counter-balance to the discontinuity and social distance so often referred to when disadvantaged students confront middle class or middle class oriented teachers.

2. Despite the long history of conditioning theory in psychology and a life time of work by Skinner in the application of this theory to practical problems of teaching and learning, schools of education are still reluctant to teach behavioral analysis and contingency management (Skinnerian approaches) to teachers in training. Yet among the educational programs for disadvantaged and problem learners that I have observed, none produce more consistent and specifiable results than do those organized around these principles. I must conclude that Skinnerian techniques belong in the armormentorium of teachers of the disadvantaged.

3. There are strong artistic and ecletic elements in our work with the disadvantaged. Some of us seem to be with it--others are not. There is no scientific approach extant. Rather most programs and practices are eclectic. Some things seem to work sometimes with some kids--others do not. Even the same thing sometimes does not work under slightly changed conditions. We are encouraged to try everything in the book. Under these conditions we have an added responsibility to train teachers to bring system and order to this experimentation and evaluation to bear upon their work. Teachers of disadvantaged students must be trained to understand and respect these processes and must be prepared to participate in them.

Since we recognize this element of art or gift in teaching the disadvantaged, we are forced to deal with its implications. It is more than appropriate that this conference should also be considering problems related to differentiated staffing. There are several kinds of skills and competencies required of teachers and school personnel to meet the needs of disadvantaged students for vocational education. The wide variety of skills and competencies can be met with a differentiated staff. However, the acquisition or development of a truly differentiated staff will require that we differentiate the routes to the classroom as well as the roles played there. The crucial need for people in the school who speak the language, command the respect, engage the attention, sustain the involvement of disadvantaged youth forces us to accept the fact that some people may be trained for some of the roles, others may be brought to them by life circumstances. An overlooked group may be the large number of black service men who will shortly be returning from Viet Nam. These men have largely come from disadvantaged backgrounds. They have not yet developed middle class identification. They have been trained in a wide variety of vocational and technical areas. They have considerable appeal as role models. They do not know much about pedagogy but do know a good bit about life and about coping with hardship at home and abroad. It may be that these coping skills are their most important asset. If in that unfortunate and mistaken war, they have found some sense of self, appreciation for cooperative human endeavors, respect for human life and its purposive development, it may be just those values that are the most important goals of vocational education for tomorrow's citizens. For the highest levels of technical and vocational skill will profit us and our disadvantaged students little if these young people continue to grow up disillusioned, alienated and turned off by the main currents of our social order. The critical learning needs of our disadvantaged students may not be in the areas for which we can even hope to train teachers to deal. A look at alienated more privileged youth is enough to convince that this is not the forte of educators. Short of the arrival of the society which is non-supportive to unwholesome development, our concern for teachers of the disadvantaged may have to focus on discovering these unique human beings who are themselves sufficiently good at coping with the vicissitudes of life and living the humane life that they can guide others in its discovery. That these human gems may also help the student acquire skills or competencies which make him employable will be a second order gain.

SEMINAR COMMENTS

DR. EDMUND GORDON

SEMINAR COMMENTS

Edmund W. Gordon*

I. Teaching and learning have in common the fact that they both have a large problem-solving component.

The first thing I want to get across to would-be teachers is the concept of the school as a center for inquiry and teaching as a continuous process of research; i.e., problem definition, logical problem analysis, data gathering and analysis, hunch or theory development, experimentation and evaluation.

Instead of beginning by giving teachers answers and techniques--I want to begin by giving the questions and problems--helping them to develop attitudes and habits of inquiry.

II. Good teaching seems to be positively associated with confidence, compassion, empathy and ability to use one's self creatively and freely in human interactions.

Dr. Davies spoke last night of the role of attitude and positive expectation. I made the same point in my paper. To move toward the development of these attributes or characteristics I have three recommendations:

A. I would introduce sensitivity training for prospective teachers in much the same way as we require didactic analysis for prospective psychoanalysts.

Learning to understand one's self and selves of others in group interaction can be a powerful energy generating and potential releasing force.

A great part of teaching consists of managing oneself and others in group interaction and teachers are poorly prepared to do this. I would make sensitivity training an early and continuous part of my teacher training program.

B. I would introduce Judo or Karate for prospective teachers. Most of us have major hang-ups relative to personal relative to personal security. We fear real or symbolic inability to protect ourselves. The group dynamics experience should help on the psychological side--self defense should help on both.

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There is the added advantage in work with youngsters who may be more at home with motoric or violent express expression of feelings, of being able to quickly establish one's authority or integrity of person.

Not to mention the contribution of offsetting the epidemic fear of black or minority group militancy.

C. I would introduce supervised direct experience with varieties of student populations, cultural groups, and communities. I don't believe in simply sending people out to "get to know the disadvantaged." The experience should be programed so as to provide specific experiences--some positive and some negative--but under the supervision of one who can serve as a model for teacher behavior.

III. The introduction of the teaching model is not incidental. Education has given lopsided emphasis to the didactics--modeling dichotomy. We depend too heavily on didactic methods, lecturing, telling, explaining verbal examples and too little on concrete demonstration--concrete example--the providing of a model. Yet, there are very few experiments in educational psychology where modeling has not proved to be more productive in efficient learning than has didactics.

I would then make clinical demonstration teaching my major instructional technique and would insist that my teachers in training utilize a similar emphasis on modeling and use of self as a model.

This point is not unrelated to point II where the person of the teacher was stressed.

IV. Role of the significant adult.

Qualitative analysis of behavior leading to individualized prescriptions for learning.

V. There are categories of teaching behavior.

A. Technical skill
B. Coping skills
C. Competencies and understandings
D. Conviction and values

People differ in their abilities with respect to communicating these behaviors.

A. *Technical skills*--depend heavily on automatic reactions, habit formation, routinization.
B. *Coping skills*--involve adaptation, problem solving, self management, and utilization.
C. *Competencies and understanding*--require specific knowledge, analysis of information, and synthesis of information.

D. *Convictions and values*--involve esthetics, ideation, high order abstractions.

All of us want students and teachers who can handle all of these. We seldom find them in one person--not even in ourselves.

We also don't know much about developing these behaviors and thus may be forced to try to recognize them in our prospective teachers.

This leads me to conclude that we don't train for everything. There are some things for which we recruit--and

Recruit differentially
Train differentially
Staff differentially

Differentiation should not be alien to us since we have long had an ideational commitment to differential treatment of children. I would then recruit teacher trainees with different teacher behavioral goals in mind.

I would try to broaden these behaviors wherever possible, but at least enhance the behavior for which the teacher was recruited and help him to understand how his role complements and is complemented by other teacher roles.

In each of these categories I would overtrain so that the behavior could be utilized under widely varying conditions to achieve a teaching end.

With these five emphases I would still expect wide variations in individual teacher practices, and I would expect varying patterns of success and failure. For we are still forced to be eclectic in our approach to education. We have no sure fire educational treatments. There is still much art and pragmatism in what we do. Some of us have or develop the touch. Others of us do not. Some things work sometimes with some kids, others don't.

Returning to my first point concerning experimentation and evaluation, I would teach prospective teachers to respect these processes and to participate in them as partners.

There was a time when farmers used to spread manure to fertilize their crops. Some crops flourished, others barely survived and still others died before we learned that there is no universal fertilizer. Slowly we learned to do qualitative analyses of soil conditions, of plant requirements and to develop chemical compounds which which were designed to match the specific requirements of specific crops growing under specific conditions. We even learned which chemicals had to be put into the soil at what time before or during the life of the plant. Agricultural research has reached a level of high sophistication and successful farming has become a science.

There may be aspects of education which will forever be artistic, but we teacher educators have the opportunity and the responsibility to begin to make all who would practice pedagogy _artists_ who are also _scientists_.

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TEACHER EDUCATION FOR TEACHERS OF THE DISADVANTAGED

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TASK FORCE MEMBER REACTIONS

REACTIONS TO DR. GORDON'S PAPER

Herbert D. Brum*

American education, as presently conceived and operated, emphasizes the importance of student mastery of basic communication skills. I think no one would question the need for the teaching of basic communication skills. The point, however, is how these are taught so that they are meaningful to the person who is being taught. Quite often communication skills are taught for the sake of learning rather than for the sake of goal achievement. Perhaps, one of the major failures of public education in the United States has been its tendency to move from the practical application of knowledge to the theoretical in terms of instructional emphasis.

The recent study entitled "The People Left Behind" points out the importance of lack of relevance of education to failure and school dropouts in the rural deprived population. Other studies of the causes of school dropouts and education impairments further emphasize the need for more education to life relatedness. Another objective of education emphasizes the importance of developing student interest in learning and increased capacity for continued learning. However, in speaking of the disadvantaged, I think we neglect to recognize that often these people are those who cannot afford to wait for years for immediate satisfaction of human needs. These people often must see more immediate pay-off, more pertinent relevance to that which is learned in school, and the effect it has upon their life and their immediate goal satisfactions.

When we analyze the disadvantaged we must begin to recognize that the school system by virtue of its early contact with youth really is the institution that labels youth as disadvantaged. It has been our public education system that has characterized, classed, and labeled students as either achievers or under-achievers and, therefore, educationally disadvantaged. When we recognize there are growing numbers of students who are being classed as educationally disadvantaged, this number in itself may not be too alarming. When we recognize that the percent of students in public education is growing in the area of disadvantaged, we then begin to become alarmed. According to a recent report of the 66th Yearbook of the National Society of the Study of Education, 15 to 20 percent of all the in-school youth of this country are considered to be educationally disadvantaged. There are 35 percent in our large cities that are in this category. When we recognize that this percentage keeps climbing, we must begin to point an accusing finger at our usually accepted goals and procedures of operation in public education.

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Our educationally disadvantaged youth, or at least those who have been labeled as such by public education in the early years, may not in reality be underachievers in the eyes of other facets of American society. They quite often are not underachievers in the eyes of employers in business and industry. They often may possess characteristics which are prized by employers such as: energy, enthusiasm, willingness to work, manipulative abilities, manual dexterity, mechanical aptitudes, and others. However, these students are often taught that since they are not inclined toward abstractions, they are failures as people. This brings me to a very critical comment about many of our presently accepted goals and objectives of American education. They seem to emphasize the importance and value of education for the sake of education, rather than the importance and value of education in terms of what it can provide its recipient as far as success and accomplishment in the real world is concerned. Certainly in working with the disadvantaged, we have found by example and by experience that those who have been labeled as educationally disadvantaged quite often respond very well to education that is real life related giving immediate return and pay-off in terms of money, material things, and satisfactions that come with the accomplishment of tasks that are recognized as important by society.

Quite often our present educational system, operating under the very objectives set forth in this paper, has produced students who are often taught that since they are not inclined to value education for the sake of education, since they are not interested in the study of mathematics for its sake alone, but only in terms of what it can do for them, they become alienated and disadvantaged.

Perhaps, some of our goals should be rearranged so that we could bring education and its need back into the focus of attention which it was given by our forefathers and those who used education and hard work as a means of becoming established on the social and economic ladder leading toward success.

The American dream often has been characterized by those who utilize any pragmatic means at hand to achieve monitary and social success in this free enterprize system. The reason early immigrants encouraged their children to attend school and succeed in school was not one of achieving for the sake of achievement. It was very mercenary in that it was one for achieving so that the youth could secure and hold a better job and gain the recognition in social status that goes with success of that nature. Since our educationally disadvantaged seem to be unable to perceive meaning and usefullness in communication skills mainly reading, writing, and arithmetic, for the sake of mastery of them as an end of themselves, they are considered as failures by our educational system. However, when these same so-called disadvantaged youngsters begin to see a relation between the communication skills and the real world in terms of world of work, careers, and jobs, in terms of their accomplishment and success in life, they begin to perceive education as important. Education over the years quite often has failed to keep in tune with the real world and only those students who can succeed in the abstract terms ever meet with much feeling of success. Our educational system, presently operating under the very principles the author proposed, is busy turning out successes in education but failures in life. Quite often a success in education is a success in life but it is incidental and not a direct and intentional outcome of the educational system.

Perhaps it is time we begin to look at our educational goals and start reorienting them in terms of the world in which we live and the things it takes to be a success and gain recognition in it, rather than to continue to hold to the old concepts of education for the sake of education. Some of the things that Vocational Education has learned through the adaptation of real jobs to education can be incorporated in such a way that new meaning is given to all education and that Vocational Education or work oriented education can become the core around which other aspects of education including the communication skills, the love of learning, etc. can become meaningful and take on purpose.

When we begin to look at the techniques of managing knowledge and its importance as an educational objective, we also begin to look toward the purpose for which we manage knowledge. Do we manage knowledge for the sake of moving it about such as we might scatter seed upon barren ground, or do we manage it for a purpose? Perhaps, we need to integrate knowledge management as a part of career orientation. It quite logically could become a part of career planning and development. Certainly the management of knowledge just for the sake of managing knowledge would be of interest to only those of us who are very philosophically inclined.

In looking at the objectives of education, I think we ought to try to use a pragmatic approach and relate the importance of Vocational Education, or if the term is more palatable, work-oriented education to the total education structure and the career orientation of that structure. When it is recognized that more and more youth are beginning to become alienated from education and see little value in it, it becomes apparent that new ways of combining and new ways of redirecting educational programs must be found. Perhaps the new way is to orient and relate all aspects of education to the career goals of students as related to the real world in which we live.

One of the great educational needs of disadvantaged youth seems to be a more accurate understanding of the work force and the various mechanisms related to securing and holding a job. Quite often we begin to feel that all that is needed to satisfy an educational need of this type is to insert into the curriculum a new course labeled "The World of Work" or some such title. Hopefully by getting students together and giving them a course in jobs and the world of work or careers, whatever term is to be desired will result in the students acutally understanding what kinds of jobs there are and how to go about preparing for, securing, and holding these jobs. Unfortunately students quite often have every opportunity available now for doing this sort of thing as far as learning about the world around them is concerned. For example, most children are aware of pictures depicting various jobs, aware of job roles played by the adult world as depicted in television and movies. They are also aware of the broad spectrum of careers as they hear about them on the radio and other advertising mass media. However, even though these youth are bombarded, surrounded, literally immersed in all kinds of material that tends to illustrate the kind of jobs that surround us, they still apparently do not really have an understanding of what kinds of jobs there are and what it takes to secure and hold them in terms of the real world. Therefore, simply inserting another course, even though it may be quite adequately staffed and financed in terms of providing materials, guides, and audiovisuals will not accomplish the task. Apparently a new means must be found to help the disadvantaged get a more meaningful understanding, a more realistic realization, and feel for jobs than has been done in the past. Quite likely many new efforts along this line will be tried, however, it would seem that anything that is to be successful in this regard must hit at the interest of the disadvantaged in terms of job relatedness and relevance to the world in which he is living. Combinations of in-school experiences learning about kinds of jobs coupled with actual trips, visitation, and observation of various workers on the job with an opportunity to discuss with workers some of the skills they have and some of the things they need to know is a very important part of real understanding of jobs on the part of the student. It is quite likely that the facilities of school vocational education shops and laboratories can be utilized with younger students in order to help them get a feel for the kind of equipment and the kind of work situation in which certain jobs are conducted. These students then should have an opportunity to couple their actual working experience in the school in real surroundings in well equipped shops to visitation of firms where that kind of work is being done. Quite often it may be necessary for certain industries, or groups of businesses and industries, to form an alliance with the public school in terms of adopting it for the purpose of helping students understand the world of work in terms of real jobs and competencies needed to hold jobs.

In helping disadvantaged students gain a better concept of jobs as they relate one to another on the career ladder, I would like to point out that there is a serious lack of information on the part of employment services showing how one job in a cluster relates to another higher skilled job. Quite often in working with the disadvantaged, we find a natural tendency on their part to believe that all educators who are interested in helping them prepare for a job are interested primarily in helping them prepare for a low level job and then locking them into that job. This, of course, is a distortion and caused by a feeling of exploitation that has been built into the background of many of these youngsters. Certainly the goals and objectives of disadvantaged youngsters toward jobs should be recognized and everything should be done to help them arrive at their own realistic starting points in terms of job preparation and entrance. However, a great deal needs to be done to help these students realize that work experience on one level, perhaps a service level job can become the most viable and valuable background of experience and accomplishment that they will have in terms of getting them a better and more highly skilled job. This experience then in turn will help them to gain further confidence in themselves and their ability which will lead to higher level jobs. Too often student goals are unusually high and a bit unrealistic due to a lack of understanding of the job world. However, educators should not bemoan the fact that these goals are high but should rejoice and capitalize upon them and help the student realize the steps that need to be taken, and perhaps the succession of jobs that need to be held and mastered, prior to reaching his career goal job. Vocational educators, particularly teacher educators, should help teachers of the disadvantaged begin to realize the value of helping students understand the steps they will need to follow in terms of climbing the job ladder toward achievement of the goals that the youngster has set for himself.

Quite often when disadvantaged youth are asked about career goals they will respond with some lofty goal such as being an engineer, executive or other similar professional position. Too often educators tend to laugh at this ambition on the part of youth with so many handicaps in their background. This, of course, produces a very harmful reaction. The approach should be that of trying to help the student gain an understanding of the steps he may need to take to achieve that particular goal. In the case just mentioned, there is quite a broad spectrum of jobs in the whole field of engineering and business, all of which may lead to advancement toward the goal of engineer or executive. When disadvantaged students begin to understand the total approach to gaining their career objectives and the skills they need to master for this achievement, they in turn will be in a position to accept themselves and be more willing to begin to start the climb upward. Too often many educators also have a false concept of the means for achieving career goals. Since most educators start out by going to elementary school followed by high school, followed by four years of college, followed by two, four, or six years of professional school and then on the job, they have the feeling that the route they took is the only one to achieving certain career objectives; that is the route of in-school preparation totally within various institutions designed for that objective. They fail to recognize that a large number of people get to high positions through a succession of jobs starting with the skilled, the semi-skilled, leading up through the technical and professional levels. This concept certainly is one that should be better understood by those of us who work with the disadvantaged so that we in turn can help them to make use of this procedure as a means of arriving at their potential level of achievement in terms of a job.

One of the ways in which educational needs of the disadvantaged, particularly the disadvantaged teenager, can be more realistically met is through the school cooperative vocational education program or the occupational work experience program. These programs are very successful in terms of helping youth see a direct relationship between jobs and school, and the inter-relationships that affect success on the job. Quite often, experience on a job provides the disadvantaged youth with the feeling of success and accomplishment that is imperative if he is to maintain any interest at all in an educational program. These feelings of success, as a result of an employer paying him on the job can be tied in with school educational experiences so that he perceives relevance for the educational program, and learning to read and to write can become a useful vocational endeavor in terms of his job performance. In addition, the placement of the student on the job for work experience can help to open new horizons of career opportunities which otherwise he may not have known existed. This, in turn, will help him reorient himself in terms of his school activities as well as his career goal objectives. Certainly, the responsibility for placement of students on their first job following high school should rest to some degree with the public school. For example, if public schools must assume more responsibility for those youth who are graduated and do not go on to college, then they, in turn, will need to analyze the programs that they are offering and be sure they are kept more relevant in terms of job preparation.

In reviewing the section dealing with characteristics required of teachers of the disadvantaged, I would like to comment specifically regarding teachers of teenaged disadvantaged youth in terms of vocational education. Apparently, one of the aspects of the problem of securing good teachers of disadvantaged children relates to the need for all the characteristics that go to make up the kind of a person we consider as emotionally and socially mature. Certainly, if we recognize the fact that those who are educationally disadvantaged are really the hardest to teach, then it would follow that if we are to give the amount of emphasis to this area of endeavor that we should, every effort should be made to provide them with the best teachers. In order to do this we must provide a means whereby we can attract the mature, human, socially, and emotionally mature person. This means that salaries will need to be in line with the teaching task, rather than in line with tenure and experience. Some means will need to be provided whereby those who work with the hardest to teach can be compensated for the additional difficulty and hazards of their job. We will need to make sure that these classes of the hard to teach are not used as penal situations for teachers who have incurred the disfavor of the administration.

We must rebuild the administrative structure of staff personnel in the school system in such a manner that the most mature, the most experienced, the most adept master teachers will have the opportunity to work with the disadvantaged and receive additional monitary support as well as professional recognition for the ability to work with the hard to teach. Of course, we need to be realistic and recognize that this is a very difficult thing to accomplish since all of us try to work with those who need the least help and will provide us with the most recognition. Certainly, it is much easier to teach the very brilliant; they're very well adjusted and these students in turn will develop a good reputation for us as teachers even though we may be more a handicap to their progress than we are an asset. However, if we are to achieve any success in terms of vocational education job preparation for the disadvantaged, we must make sure that we have the most highly skilled and dedicated people working with those who need them most.

REACTION TO DR. GORDON'S PAPER

Marvin Hirshfeld*

After reviewing Dr. Gordon's paper and conference presentation I find much of what was said is compatible with my own philosophy; however, there are some areas of exception which should be dealt with.

Dr. Gordon indicated that a major revision in teacher training institutions and instruction is needed inorder to adequately prepare teachers to work with the disadvantaged. It is my feeling that this position is incorrect. A sound base for vocational teacher-education is now in operation. Therefore this present structure can be adapted to satisfy the demands made upon teachers who are working or preparing to work with the disadvantaged. This can be readily (time is critical), and effectively accomplished by doing the following:

1. Courses should include behavioral objectives on identifying salient characteristics and contributions of minority cultures so that teachers can become more sensitive to and develop positive attitudes concerning the disadvantaged. This might be accomplished through the Department of Sociology in cooperation with the Department of Education.
2. Courses in group dynamics, special education, developmental and/or remedial reading should be required as part of professional training for vocational teachers.
3. Experiences in working with the disadvantaged (both youth and adult) should be included as part of the student teaching process or through practicums operated by other departments.

Let me again repeat that these suggestions can be incorporated in the present framework of teacher education since faculty committees are more likely to accept specific revisions within present programs.

I would like to refocus Dr. Gordon's comments concerning the teaching of specific occupational skills and relationship to self image and the affective mechanism.

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It is my belief that students who are taught specific occupational skills will transfer these skills to more sophisticated occupational levels. This transfer is a product of the stimulation of the affective mechanism. A concomitant result is that the cognitive process is maintained through the opportunity provided to the student to apply classroom instruction to actual occupational requirements--tell it like it is and do it like it is.

Another factor that must be considered in this process of change is the teacher educator. Vocational teacher educators are being asked to provide leadership in developing effective teacher training programs for the disadvantaged. However, most teacher educators themselves are ill equipped to teach or work with the disadvantaged. In order for them to properly provide this leadership, teacher educators must become actively involved in working directly with the disadvantaged through in-service and field experiences designed for teacher-educators.

This view was also expressed by many of the participants and consultants in a recent national seminar on Vocational Education in Correctional Institutions (Rutgers University, June 16-28, 1968).

In summary I would suggest that all vocational teachers be given a variety of knowledge and skills that are needed to enable them to establish a meaningful dialogue with students from various cultures and of different levels of ability.

By preparing teachers to work with different students, we are providing the teachers with a "cluster" of instructional skills. The critical factor then becomes his ability to manage the learning situation through his mastery of the technical knowledge of the occupation.

REACTIONS TO DR. GORDON'S PAPER

Lloyd J. Phipps*

The task force paper on educating vocational teachers of the disadvantaged clearly establishes the "benchmarks" and emphasizes the basic considerations involved. The following statements may serve to extend, explain or implement the suggestions in the paper.

1. At present, vocational teachers are too often laboring to serve the needs of vocational subject matter and skills, not the needs of youth. Vocational teachers of the disadvantaged need to think of vocational subject matter and skills as vehicles instead of the sum and substance of their teachings. Subject matter content should be a vehicle to develop the general vocational competencies, the appreciations and work habits needed by all workers such as:

   communicating skills
   getting a job
   working with others
   getting along with employers and supervisors
   accepting assignments
   working effectively

   It may not be too important what vocational subject matter is used as the vehicle for teaching these general vocational competencies in terms of eventual later employment. The vocational subject content used as the vehicle need not necessarily be directly related to the projected future employment of a student after the formal schooling period, but it should be the vocational subject content that motivates him at the time.

2. The school, the community and the disadvantaged should be the main arena for the professional education of vocational teachers of the disadvantaged, not industry, agriculture, business or the college.

3. Vocational teachers of the disadvantaged need to be educated to question what knowledge is of most value. They need to learn to select knowledge and skills that are of most value to the disadvantaged.

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4. Vocational teachers of the disadvantaged need to be taught the language of the disadvantaged. Agricultural educators learned the necessity of talking the language of farmers 50 years ago.

5. Vocational teachers of the disadvantaged need to teach for adaptability. Teacher educators need to emphasize problem solving and role playing as effective techniques in teaching the disadvantaged. Vocational teachers of the disadvantaged must be prepared in such a way that they are capable of teaching for clusters of occupations instead of a single job.

6. Vocational teachers of the disadvantaged need to be taught to listen to and obtain guidance from the persons closest to their students, their parents. Teachers need to learn the importance of using advisory committees of parents, not just advisory committees from business, industry and agriculture.

7. Vocational teachers of the disadvantaged need sub-professional assistants. If they are to have them, teacher educators must become involved in preparing sub-professional assistants.

8. Vocational teachers of the disadvantaged need to realize that our society has shifted and that most jobs are not in production but in the service areas. The disadvantaged must be taught this fact and an appropriate number of them must be encouraged to prepare themselves as effective workers in service occupations in agriculture, business, health and so forth.

9. Vocational teachers of the disadvantaged must learn a skill that rural one-room school teachers knew well, the skill of using older youth to teach younger youth. What better way is available to teach the skill of working with people, as essential skill in all service occupations. Skill in working with people in vocational situations may be in the future much more important than skill in manipulating machines and materials.

10. Vocational teachers of the disadvantaged must be taught how to integrate vocational education with general or academic education and vice versa.

11. Vocational teachers of the disadvantaged must know how to diagnose learners and must feel responsible for this diagnosis. They must not be permitted to feel that this is someone else's job.

12. Vocational teachers of the disadvantaged need to learn how to motivate learners by promoting self-competition instead of exclusive emphasis on competition with others. Emphasis on student projects will help.

13. Vocational teachers of the disadvantaged youth must also be prepared to teach disadvantaged adults. A teacher is severely handicapped in teaching disadvantaged youth if he does not have some responsibility for teaching adults in their families.

14. Vocational teachers of the disadvantaged will need to be more adequately and systematically prepared for their jobs than other vocational teachers. With rare exceptions will it be possible to teach disadvantaged using persons from industry who have not been specially prepared to teach.

15. Teachers and prospective teachers of vocational courses who teach the disadvantaged need opportunities to work in disadvantaged homes with

    parents and grandparents
    children

    This takes time, but there are no alternatives. Vocational teachers cannot develop realistic attitudes and abilities by reading and discussing without "real" experiences.

REACTIONS TO DR. GORDON'S PAPER

Mamie Sizemore*

Dr. Gordon's recommendations in his paper and address at the seminar were quite explicit. However, I feel Dr. Gordon may have missed some positive significance in the educational programs on which he so perceptively reported.

1. "Socially disadvantaged students should not be considered as a homogenous mass. If education in general has not found the answer, and compensatory education has failed to give answers to the problems of these students, then it may be too much to expect that vocational education should or for that matter can."

   Is our education system such a hopeless failure? Aren't there any bright spots? It is time for a moratorium on purely negative criticism. Schools do not need to be made collective scapegoats for all the problems of the United States; this is unfair and unrealistic. We want, as educators, to maximize the contributions of the schools to the solution of these problems. Our schools are better than in the past, but negative criticism simply discourages teachers.

2. "We must test what we do. There must be accountability."

   Planned change is "part of the very core of democracy" and is the only logical choice available in any deliberate efforts to improve education. If educational change is to be educational improvement, we must perfect procedures to evaluate our present programs. These procedures, of evaluation, will enable us to evaluate the product of an innovation, as well as to evaluate the interpersonal dynamics involved and the linkages (between research and practice) necessary for the innovation to be invented, diffused and used.

3. "Vocational education must be built upon a foundation of adequate communication skills."

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*Mrs. Mamie Sizemore, Indian Education Consultant, Division of Indian Education, State Department of Public Instruction, Phoenix, Arizona.

The communication skills must be taught; they cannot be caught. To stop teaching in order that the student, be he disadvantaged or not, may learn by himself is to abandon education as a medium for the transmission of the accumulated knowledge and wisdom of a culture. It may be true that the teacher cannot teach but only help the student learn. But can't the education goals be restated in terms of explicit changes in behavior? Then effective methods of instruction could be designed.

4. "...these students show in school disproportionately high rates of...physical disability..."

   One of the large manufacturers of wire cable has opened a new plant in the Southwest where a large pool of unskilled workers will be hired and trained. They cannot find workers who are physically fit to perform the work required from the large pool of unemployed that are in the area.

   What good will it be for these people to receive vocational training in our schools when they are not physically fit to do the work? What part should the school play in seeing that the student is well fed and physically fit? This was missed completely.

5. "...the evidence is not convincing that effective teaching comes necessarily from understanding the life conditions of those who are being taught."

   There is much talk of poor home conditions, lack of cleanliness, substandard diets and poor motivation among our minority groups. Many teachers have set in their own minds a minimum level of personal adjustment, conditioned by their own environments, beneath which it is inconceivable to them that any child should fall and are unwilling to admit that some indeed fall below this minimum. The teacher who looks, perhaps with scorn, upon the home values and attempts to plant his own middle-class notions of success, who makes the student dissatisfied with every element of his own environment without a way out that is possible of achievement, builds a gulf between the student and his people and leaves him in a no-man's land.

6. "...teachers of disadvantaged students need to be masters of the content taught."

   Dr. Gordon wrote of problems that are hurtful, and usually avoided or "niced" over in most educational meetings. He wrote of the nitty-gritty conditions in many of our city schools. It bothered me that his paper had only "the big city" tone. There are disadvantaged children in all parts of our country in rural and small towns. They are not all of one color and from any one minority group. They come from the culture of the poor. Also missed was that the problems of boys are different from the problems of girls. There are not good and bad programs--just good and bad teachers. This master teacher who will be trained to teach the disadvantaged should be a good teacher for any student.

7. "The dynamics are not completely understood...but the effect is coming to be known as the Rosenthal Effect is convincing."

   I wish to react to this statement in light of Indian education. Do teachers fail to tap the potential ability of their Indian students? Do they fail to recognize what is of intrinsic value and meaning to their students? Do they teach the child self-rejection? Do they hide their own failures behond the statement, "That is pretty good for an Indian."

   Appropriations for Indian education in the past have been based on evidences of failures, not on basis of need. If a national examination were made of the educational needs of schools enrolling large numbers of Indians, it would demonstrate that these schools require larger appropriations not solely on the basis of past failures but because of the need of such schools to deal with a wider spectrum of social concerns. (I am sure this would be applicable for all schools dealing with hard to reach and hard to teach students.)

8. "The demands on the teacher are very great...would seem to be the super human."

   There is evidence that teachers have been transferred to ghetto schools as a punishment for defiance of administrative authority. If this can happen in one of the world's richest cities, can it not happen in the poverty pockets of America? (As an Apache leader stated, "We have more poverty pockets than we have pants in which to put them.")

   We need the best of teachers for these areas. Teachers who are not only masters of their subject area but individuals who can find the touchstones to spur hope and pride in their students, who can unleash their creative capacities and energies so that a new dynamism will enter their lives before which even stubborn obstacles will fall.

   How are these teachers to be identified; how are they to be trained? The trend has been to retool teachers by focusing on new techniques. I agree with Dr. Gordon that it is high time we give attention to retooling the teachers as people.

COMMITTEE SUMMARIES

COMMITTEE B-1

COMMITTEE LEADER--WILLIAM DRAKE
TASK FORCE RESOURCE PERSON--LLOYD PHIPPS
RECORDER--MILDRED JOHNSON

Problems identified by the committee:

1. How do you encourage successful teachers to work in schools which have predominately disadvantaged students?
2. Do we actually need two teacher education curriculums: 1) teachers of the disadvantaged, and 2) other teachers?
3. Is teaching the disadvantaged basically different?
4. Are disadvantaged students ready for vocational education?
5. In vocational-technical education can we start at the same place as we do with non-disadvantaged students?
6. How can we develop teacher confidence in teaching the disadvantaged?
7. How can we increase the integration of vocational and academic education?
8. What can be done to change the attitudes of teacher educators and teachers toward working with the disadvantaged?
9. Is the philosophy of vocational education being adequately imparted at the undergraduate level?
10. Do you isolate, segregate or integrate students with special needs?
11. How can we individualize teacher education?
12. How can we identify and select teachers for the disadvantaged?

The list of problems identified by the "committee of the whole" was abstracted into three key problems. The group was divided into three subgroups and each of the subgroups discussed one of the three key problems. The reports of the three subgroups follow:

Group I--How do we identify teachers for teaching the disadvantaged?

A. Teacher educators should have exposure to and involvement with prospective education students, their families and the community from which they come. The following might be helpful:

master teachers
audio-visual materials
literature

B. Prospective teachers might be identified at the preservice level by:

testing to identify certain values and attitudes
professional observation
  group interaction
  socio-metric testing

Group II--How do we prepare teachers of the disadvantaged?

A. Identify the unique problems in teaching persons with special needs

B. Develop in prospective teachers a philosophy of education relevant to their interests and needs

C. Preservice experience with disadvantaged people

D. Develop internships which will provide appropriate experience for teaching the disadvantaged

E. Conduct research concerning the teaching of the disadvantaged

Group III--How can we evaluate teacher education programs?

A. Use experimental models to compare programs

B. Identify characteristics of teachers who "stay with" the teaching of the disadvantaged

C. Observe teachers over a period of time to identify success factors

D. Seek ways to measure changes brought about by teacher education program

attitude change
perceptual change

3

COMMITTEE B-2

COMMITTEE LEADER--NEAL VIVIAN
TASK FORCE RESOURCE PERSON--MARVIN HIRSHFELD
RECORDER--MARILYN OSBORN

1. Special Competencies Needed by Vocational Teachers of the Disadvantaged

   - Need to know about special employment problems (sources and procedures) of the disadvantaged
   - Adept in guidance procedures
   - Ability to work with industry in business world
   - Respect for individual worth with an understanding and acceptance of all students
   - Flexible and adaptable in a variety of situations
   - A knowledge and awareness of community resources
   - Have a knowledge about and know how to diagnose learning disabilities
   - Ability to develop materials and use a variety of new techniques
   - Willing to do more than is expected of him (commitment)
   - Ability to individualize instruction
   - Ability to utilize and conduct research
   - An understanding of cultural, economic, and social characteristics of the disadvantaged group with which we are working. Also have a broad knowledge of disadvantaged groups (orientation disadvantaged)
   - Know about vocational education in general as well as own special vocation
   - Ability to work with the students outside of class--especially in clubs and out of class visits
   - Understand himself and be able to objectively analyze own behavior
   - Ability to work with parents
   - Ability to identify and use special services which are used with disadvantaged

2. Suggestions for Development of These Competencies Through Teacher Education

   - A number of pilot and experimental programs need be developed
   - Placement of student teachers in "disadvantaged" schools as a part of their education
   - Experimental programs for elementary teachers so that an introduction to occupations programs can begin in the elementary schools
   - Interdisciplinary programs in colleges and universities involving all vocational services

- Graduate fellowship for teachers with a commitment to work with the disadvantaged students
- Retraining of blacks and other minority members to become vocational teachers
- Workshops and seminars focusing on disadvantaged should be held off campus and instead, directly "on location" in disadvantaged schools

3. Background Needed for Teachers of the Disadvantaged

The present situation includes some of the following factors:

- Many Negroes develop a defeatist attitude very early in life toward finding jobs other than menial, unskilled labor jobs.
- Many Negroes do not believe that other jobs are now open to them.
- Suspicion has developed as a result of rejection of Negroes and now our sudden acceptance of them.
- Honesty is essential in black-white relationships, eliminate distrust.
- Most middle class white teachers will probably be completely ineffective in working with the Negro disadvantaged.
- Forced integration of administrators and teachers is not the answer--it is better to base assignments on personal qualities. However, the problem does exist that parents want teachers of their own kind and race.
- The best ultimate situation is where both white and Negro teachers are involved with the teaching of all children. However, teachers should be "selected" for their assignments according to personality, attitudes, and compatibility.

Desirable background for teachers of the disadvantaged should include:

- Knowledge of the process of attitude in order to help the disadvantaged develop a different self concept, i.e. to modify the defeatist attitude.
- How to develop personal job competencies--motivation, promptness, proper dress, loyalty, etc.
- Teachers must be familiar with ways in which to help students experience success and build upon those success experiences.
- How to organize, develop and work effectively with advisory committees.
- How to deal with parents.
- A background in educational sociology is important for these teachers.
- Modification of courses to include history and study of all ethnic groups. Many courses have been deficient or void in contributions and history of ethnic groups.

4. Challenge for Teacher Education
   - Develop programs for recruitment for the retraining of those having previous experience in teaching in order to draw more people in the vocational education program. Included here would be the involvement of people from business and industry.

- Differential staffing will probably have more important implications for vocational education than for most other fields.
- People to be involved in a differentiated staff might include the following:

  the master teacher
  teaching aides
  experienced businessmen or tradesmen
  persons with background in social work
  parents

  In all cases, persons who have lived, worked or otherwise had experience with the disadvantaged should be included on this differentiated staff.
- Teacher education institutions therefore need to be concerned with the development of differentiated staffs if the disadvantaged student is to be adequately served.
- A long-range massive public relations program must be carried out to encourage our large cities and our rural areas to provide high quality vocational education programs for all citizens and with special emphasis on the disadvantaged.

When the political, civic, business, industrial and educational leaders are convinced of the value of sound vocational education in helping to solve the problems of the disadvantaged and take steps to implement a high-quality program, the solution will be much nearer at home.

COMMITTEE B-3

COMMITTEE LEADER--ROBERT CAMPBELL
TASK FORCE RESOURCE PERSON--HERBERT BRUM
RECORDER--SARA CORDERY

The group identified and discussed 11 problem areas:

1. Learning career opportunities available to students
    - Expose potential teachers to success models
    - Prepare potential teachers to assume responsibilities for placement services
    - Field trips to industries, U.S.O.E., etc., to encourage an awareness of economic and social factors regarding employment.
2. Helping teachers have high expectations for students
    - Expose potential teachers to models of success among the disadvantaged groups to combat stereotyping
    - Programs on teachers as variables (Example: research relating to teacher expectancy)
    - Informal research on relationship between teacher and student evaluation of the student
    - Encourage individualized instruction
    - Assist potential teachers to develop a partnership with business and industry
    - Expose potential teachers to experiences involving parent expectations
3. Learning to diagnose students (career goals, job ladders, educational problems)
    - Field experiences in tutorive programs, reading clinics, community agencies
    - Contributions to the teacher education program by referral agencies
4. Developing 'coping' skills--assist potential teachers in using gaming devices, simulation, etc.
5. Use of all educational resources in the community
    - Much greater use of the public school teachers who have shown success in dealing with the disadvantaged as models
    - Use of same successful teachers as resource people
    - Use of literature, including magazines, newspapers
6. Attitudes of teachers
    - Use of attitude inventories
    - Include more courses in the social sciences, particularly in anthropology, sociology, psychology, and economics
7. Working as a professional team
    - Work with social science departments
    - Inter-college counseling staff
8. Getting vocational teachers to work with other teachers

- We must set the example in working with others and involve others in our own teaching
- Both through student teachers and examples show how programs work better if others are involved

9. Improving the image of vocational education
    - Higher qualifications for teachers
    - Appear in programs on campus and in the community
    - Communicate professionally
    - Active participation in profession
10. Selection of teachers
    - Teacher trainers seeing students that have empathy and some understanding
    - Identification of potential teachers through clubs, activities, etc.
    - Working with vocational rehabilitation
    - Former ministers and business people who are willing to return for certification
    - Working with others to help identify those who have the interest in teaching the disadvantaged, such as dorm counselors
11. Re-training of teachers
    - Select first for personal qualifications
    - Get subject matter teachers into the program
    - Persons conducting the re-training program should be successful
    - Work with a professional team
    - As a university, our responsibility is to work closely with other training sponsors

COMMITTEE B-4

COMMITTEE LEADER--EDWARD FERGUSON
TASK FORCE RESOURCE PERSON--FLOSSIE BYRD
--MAMIE SIZEMORE
RECORDER--MARY KLAURENS

Inherent within the discussion which occurred in Group 4 were two basic needs:

1. To determine ways and means of broadening teacher prospective into the realities which confront the disadvantaged.
2. To find answers which are practical rather than theoretical and which capitalize upon the dominant themes influencing the behavior of the disadvantaged.

Because of this centrality of focus, several pertinent questions were posed. Included among these were:

1. Should there be a difference in teacher education programs at the preservice level for the preparation of teachers of the disadvantaged, or can present programs be modified--to insure inclusion of pertinent experiences in this area--thereby insuring the broadening of the repetoire of behaviors of all teachers in the cognitive, affective and psychomotor realms?
2. What should be our definition of the disadvantaged? Should it be the definition appearing in the Vocational Education Act of 1963 or should we choose another?
3. What can teacher educators do in assisting prospective teachers as well as experienced teachers become diagnosticians? What should be the nature of clinical experiences, if this is the answer?
4. Who should teach the disadvantaged--the intrinsically or extrinsically motivated?
5. What competencies and understandings, values and convictions are essential in order that teachers develop coping skills?
6. What is the role of the vocational educators with respect to each of these concerns?

In an effort to crystallize thinking and provide specific assistance to both teacher educators and administrators comprising the group, two subgroups were formed. One group concerned itself with the basic issues and considerations revealed in the questions as these related to in-service education. The second group concerned itself with preservice education and the relationship of the issues to course content, student teaching and occupational experience.

Specific outcomes of the discussion were:

I. In-service Education

A. Of specific concern is the matter of assisting in-service teachers in the development of understanding of their own problems in working with the disadvantaged. Experiences deemed pertinent are:
   1. In-depth study of the disadvantaged--their problems, needs and concerns.
   2. Identifying effective educational techniques and developing skills for coping with instructional situations in the absence of educational media, instructional materials, etc.
   3. Developing techniques for contacting employers to determine needs and problems existing in the area of employment.
   4. Recognition of the effects of a prejudicial system upon person(s) being prepared for employment.
   5. Analysis of occupational clusters to insure additional job opportunities in the face of 4 above.

B. Having thus identified the nature of experiences needed to develop understanding, attention was focused upon additional information needed:
   1. What are effective techniques for recruiting in-service teachers to participate in the in-service education program?
   2. What motivational techniques are most effective?
   3. Should instruction be conducted on an individual or group basis?

C. Some specific activities agreed upon as possible next steps in implementing ideas from this seminar were:
   1. Conducting workshops, conferences, institutes and/or experimental programs which demonstrate the reality of certain procedures and the successes attained through the use of these procedures.
   2. Replication of institutes such as that conducted by Byrd at Prairie View Agricultural and Mechanical College for Home Economics Teachers of the Disadvantaged has distinct possibilities across subject matter areas.
   3. Utilization of experimental materials such as those developed by Campbell at the University of Illinois in preparation of Vocational Technical Teachers for Laboratory Classes for the Drop-Out Prone with the accompanying film should be useful in demonstrating clearly some of the possibilities open to teachers.

II. Preservice Education

A. Specific concerns in this area centered around:
   1. Sensitizing the prospective teacher to individual differences and the need for preparing teachers for differential teaching.
   2. The extent to which vocational education may be the vehicle to move students into the mainstream of academic life and the role of the teacher educator in equipping prospective teachers with understanding for their role in this matter.
   3. The necessity of bridging the psychological and experimental gaps in student's background.

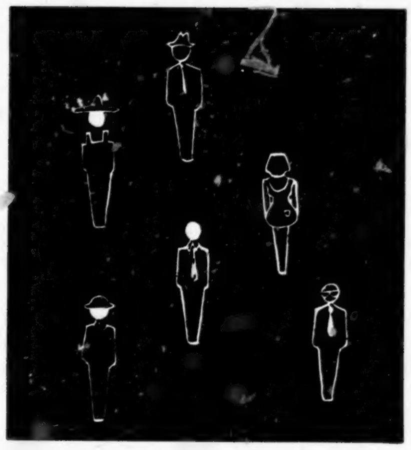
4. Sensitizing prospective teachers to the importance of the affective component in the teaching-learning process.

B. Some specifics agreed upon as a means of removing the barriers inherent in the concerns and/or providing essential experiences included:

1. Provisions of intercultural experiences--observation and participation--as a basis for gaining insights into the culture of the disadvantaged.
2. An interdisciplinary approach to the development of basic concepts essential to the understanding and teaching of the disadvantaged. These substantive experiences to be centered around integrative themes--the culture, psychology and life styles of the disadvantaged, educational problems and needs, methods and techniques for alleviating educational problems, the sociological, anthropological and psychological interrelationships and implications of these--rather than a "cranberries on a string approach."

C. The question of providing student teaching experiences in disadvantaged areas as well as occupational experiences was explored. No conclusions were reached.

It was conceded that the extent to which specific activities suggested in the area of preservice education could be implemented was dependent upon the individual circumstances surrounding a specific teacher education program.



APPENDICES

A. GUIDELINES AND PLANS FOR THE SEMINAR
B. SEMINAR PROGRAM
C. EVENING FILM PROGRAM
D. SUMMARY OF EVALUATIONS BY PARTICIPANTS
E. SEMINAR STAFF
F. SEMINAR PARTICIPANTS

APPENDIX A

GUIDELINES AND PLANS FOR THE TEACHER EDUCATION SEMINAR

OCTOBER 21-24, 1968
CHICAGO, ILLINOIS

I. Introduction

The seminar will revolve around three topics:

a. *Differentiated Staffing*--the development, training and utilization of various levels of professional and semi-professional staff in the total context of occupational education.

b. *Vocational-Technical Education for the Disadvantaged*--the development and utilization of appropriate materials and teacher education for better occupational education for disadvantaged groups.

c. *The Professional Teaching Content*--the development of more appropriate and efficient methods for providing the professional pedagogy needed by vocational-technical teachers. This topic will be handled by two major presentations at the beginning of the seminar and a wrap-up presentation on the last day.

Items "a" and "b" will be handled as separate seminars within the context of the professional teaching component of vocational and technical education. They will receive major attention through the commissioning of two task forces who will work on the problem in advance of the seminar.

II. The Task Forces

Each task force will be composed of six nationally recognized scholars who are knowledgeable and involved in their respective problem area. Members of the task forces will assist in the development of a provocative and visionary position paper which critically analyzes the problem and suggests stimulating solutions to various problem facets. Two major papers will be developed by the task forces. One paper will consider the role of vocational-technical teacher educators in preparing teachers within the framework of differentiated staffing and the second will consider the problems of preparing teachers to work with the disadvantaged. The papers will be mailed to the seminar participants well in advance of the seminar so that they might be studied for reaction. These papers will then provide the springboard for dialogue at the seminar.

III. Author of the Task Force Paper

The author of the task force paper will be selected by The Center committee for the seminar. His responsibilities will be to:

a. Write a thought-provoking paper concerning the topic. The ideas presented should represent the best thinking of the task force as well as the literature. However, the paper should not be a compilation of all ideas or a compromise. He should feel obligated to take a position and develop it without regard to tradition.

b. Present a major paper at the seminar. The presentation should not be a reading of the paper. The seminar presentation should offer alternative solutions, second thoughts and controversial or thought-provoking issues which will stimulate the small groups during the next day's activities. The presentation should also outline some suggested steps for implementing some of the new ideas suggested in the paper.

c. Act as an advisor to The Center committee in developing the final report of the seminar.

IV. Task Force Member

The task force will be composed of six members as follows: two people from general field of education (one will write the task force paper), three vocational-technical teacher educators, and one state staff member in vocational-technical education. The responsibilities of the task force members include:

a. Assist in the collection of ideas, data and other material for the paper. These should be sent to the author of the task force paper.

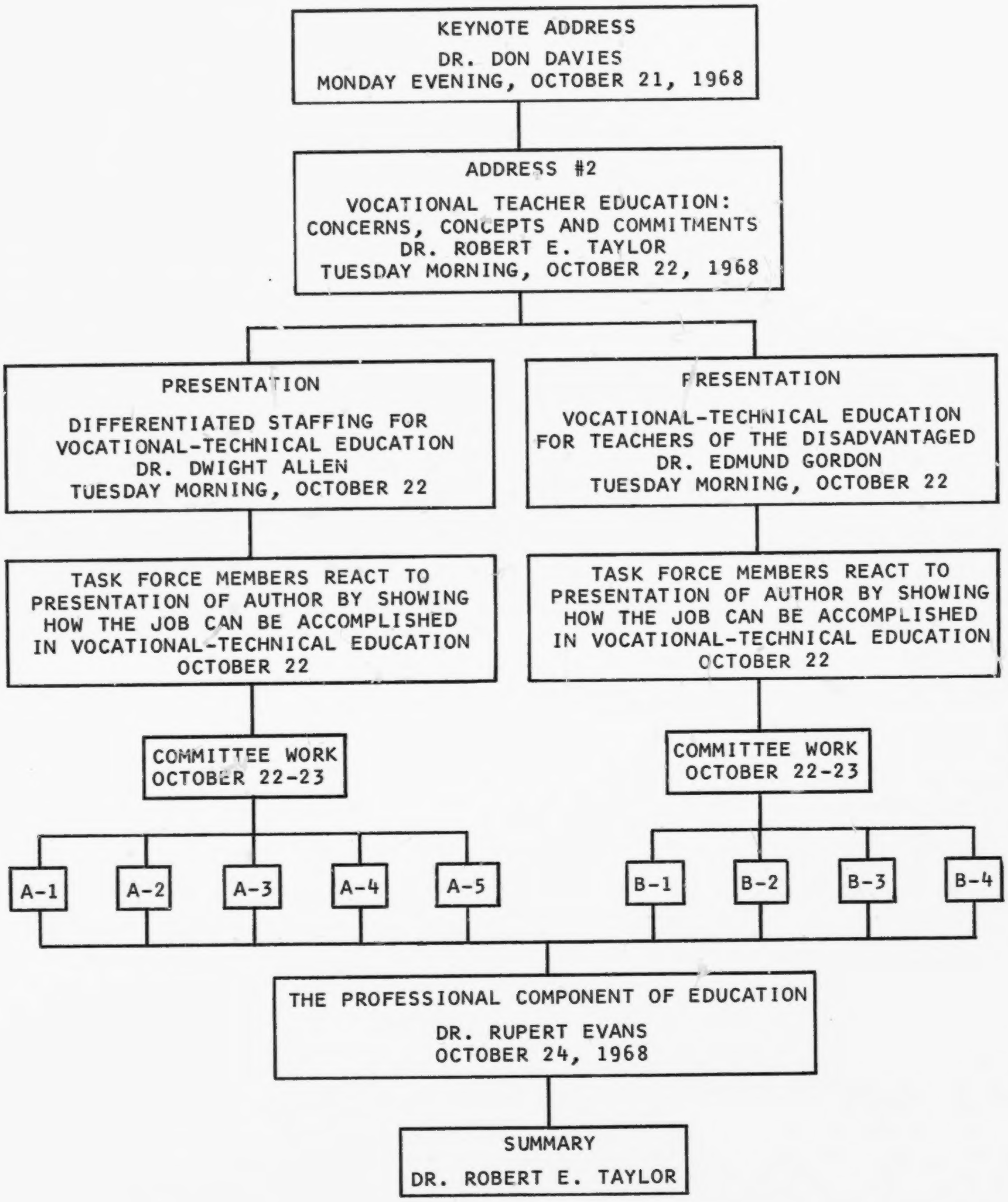
b. Attend two meetings to assist in working out the details of the paper and seminar. One meeting will be held in May or June and the second will be held Monday afternoon, October 21, 1968.

c. Review the paper and provide the author with a written critique. These may or may not (to be determined) be included in the final report.

d. (1) Attend the seminar in October. Serve on an implementation panel or symposium following the major presentation by the author.

(2) Serve as resource person in one of the interest groups which will attempt to operationalize the topic.

GENERAL FRAMEWORK FOR THE TEACHER EDUCATION SEMINAR


KEYNOTE ADDRESS
DR. DON DAVIES
MONDAY EVENING, OCTOBER 21, 1968
ADDRESS #2
VOCATIONAL TEACHER EDUCATION: CONCERNS, CONCEPTS AND COMMITMENTS
DR. ROBERT E. TAYLOR
TUESDAY MORNING, OCTOBER 22, 1968
PRESENTATION
DIFFERENTIATED STAFFING FOR VOCATIONAL-TECHNICAL EDUCATION
DR. DWIGHT ALLEN
TUESDAY MORNING, OCTOBER 22
PRESENTATION
VOCATIONAL-TECHNICAL EDUCATION FOR TEACHERS OF THE DISADVANTAGED
DR. EDMUND GORDON
TUESDAY MORNING, OCTOBER 22
TASK FORCE MEMBERS REACT TO PRESENTATION OF AUTHOR BY SHOWING HOW THE JOB CAN BE ACCOMPLISHED IN VOCATIONAL-TECHNICAL EDUCATION
OCTOBER 22
TASK FORCE MEMBERS REACT TO PRESENTATION OF AUTHOR BY SHOWING HOW THE JOB CAN BE ACCOMPLISHED IN VOCATIONAL-TECHNICAL EDUCATION
OCTOBER 22
COMMITTEE WORK
OCTOBER 22-23
COMMITTEE WORK
OCTOBER 22-23
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A-2
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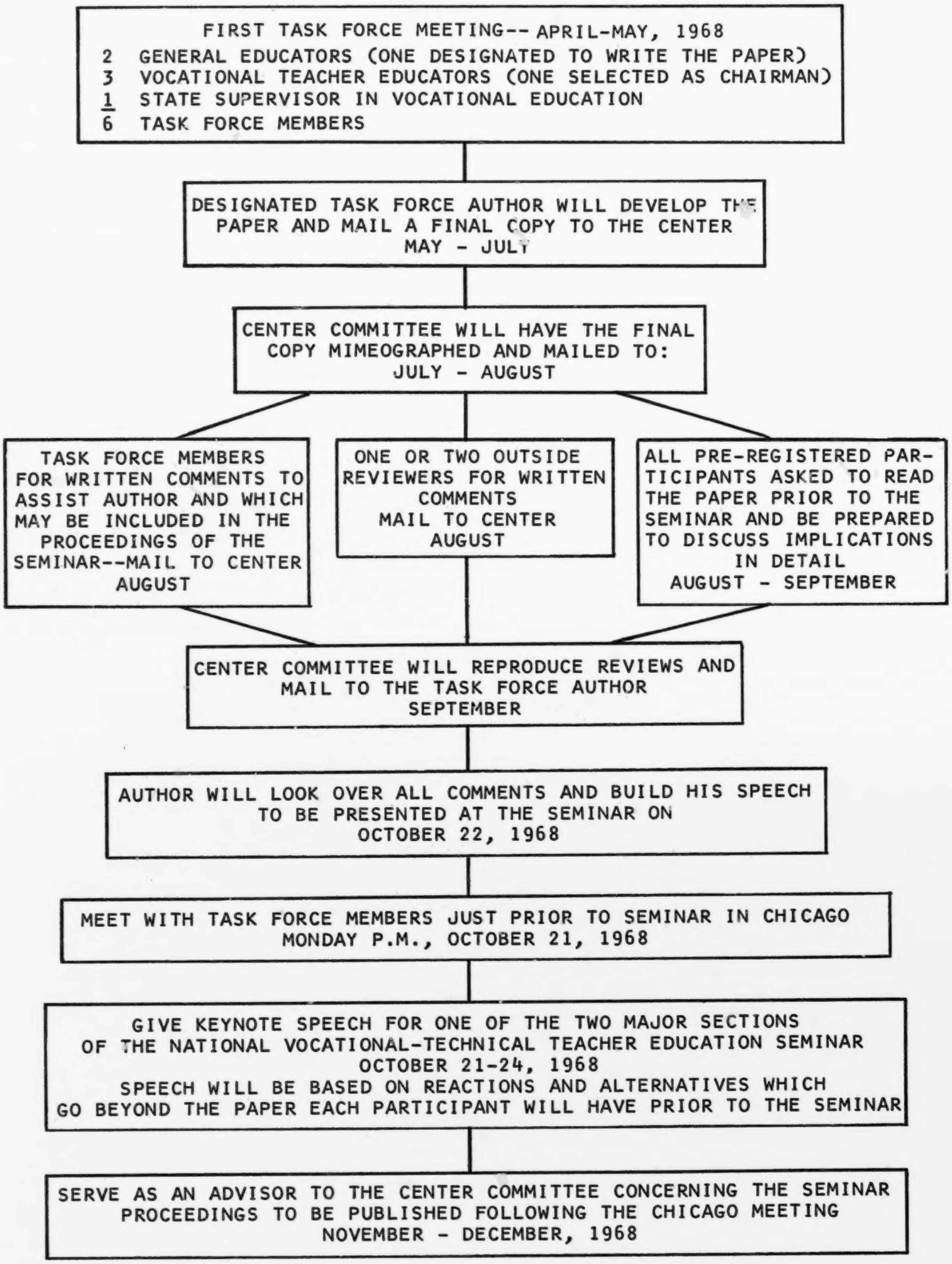
B-3
B-4
THE PROFESSIONAL COMPONENT OF EDUCATION
DR. RUPERT EVANS
OCTOBER 24, 1968
SUMMARY
DR. ROBERT E. TAYLOR

THE TASK FORCE



FIRST TASK FORCE MEETING-- APRIL-MAY, 1968
2 GENERAL EDUCATORS (ONE DESIGNATED TO WRITE THE PAPER)
3 VOCATIONAL TEACHER EDUCATORS (ONE SELECTED AS CHAIRMAN)
1 STATE SUPERVISOR IN VOCATIONAL EDUCATION
6 TASK FORCE MEMBERS

DESIGNATED TASK FORCE AUTHOR WILL DEVELOP THE PAPER AND MAIL A FINAL COPY TO THE CENTER
MAY - JULY

CENTER COMMITTEE WILL HAVE THE FINAL COPY MIMEOGRAPHED AND MAILED TO:
JULY - AUGUST

TASK FORCE MEMBERS FOR WRITTEN COMMENTS TO ASSIST AUTHOR AND WHICH MAY BE INCLUDED IN THE PROCEEDINGS OF THE SEMINAR--MAIL TO CENTER
AUGUST

ONE OR TWO OUTSIDE REVIEWERS FOR WRITTEN COMMENTS
MAIL TO CENTER
AUGUST

ALL PRE-REGISTERED PARTICIPANTS ASKED TO READ THE PAPER PRIOR TO THE SEMINAR AND BE PREPARED TO DISCUSS IMPLICATIONS IN DETAIL
AUGUST - SEPTEMBER

CENTER COMMITTEE WILL REPRODUCE REVIEWS AND MAIL TO THE TASK FORCE AUTHOR
SEPTEMBER

AUTHOR WILL LOOK OVER ALL COMMENTS AND BUILD HIS SPEECH TO BE PRESENTED AT THE SEMINAR ON
OCTOBER 22, 1968

MEET WITH TASK FORCE MEMBERS JUST PRIOR TO SEMINAR IN CHICAGO
MONDAY P.M., OCTOBER 21, 1968

GIVE KEYNOTE SPEECH FOR ONE OF THE TWO MAJOR SECTIONS OF THE NATIONAL VOCATIONAL-TECHNICAL TEACHER EDUCATION SEMINAR
OCTOBER 21-24, 1968
SPEECH WILL BE BASED ON REACTIONS AND ALTERNATIVES WHICH GO BEYOND THE PAPER EACH PARTICIPANT WILL HAVE PRIOR TO THE SEMINAR

SERVE AS AN ADVISOR TO THE CENTER COMMITTEE CONCERNING THE SEMINAR PROCEEDINGS TO BE PUBLISHED FOLLOWING THE CHICAGO MEETING
NOVEMBER - DECEMBER, 1968

APPENDIX B

NATIONAL VOCATIONAL-TECHNICAL TEACHER EDUCATION SEMINAR

OCTOBER 21-24, 1968

SHERATON-CHICAGO MOTOR HOTEL
CHICAGO, ILLINOIS

SEMINAR PROGRAM

MONDAY, OCTOBER 21

4:00-8:00 p.m. REGISTRATION

8:00 p.m. OPENING SESSION

Purpose and Objectives of the Seminar

Dr. James W. Hensel, Seminar Chairman
The Center for Vocational and Technical Education
The Ohio State University
Columbus, Ohio

Keynote Address

Dr. Don Davies, Associate Commissioner
Bureau of Education Personnel Development
U.S. Office of Education
Washington, D. C.

TUESDAY, OCTOBER 22

8:30-9:30 a.m. SECOND GENERAL ASSEMBLY

Organization of the Seminar

Dr. James W. Hensel
Seminar Chairman

Principal Speaker

Dr. Robert E. Taylor, Director
The Center for Vocational and Technical Education

9:30-10:00 a.m. BREAK

DIFFERENTIATED STAFFING FOR VOCATIONAL-TECHNICAL EDUCATION

TUESDAY, OCTOBER 22

10:00-11:30 a.m. SUB-SEMINAR MEETINGS

1:00-2:15 p.m.

Introduction

Dr. Robert E. Taylor, Director
The Center for Vocational and Technical Education

Principal Speaker

Dr. Dwight W. Allen, Dean
School of Education
University of Massachusetts

Task Force Member Reactions

Professor L. O. Andrews
Teacher Education Department
The Ohio State University

Dr. Elizabeth Kerr
Chief State Consultant
Health Occupations Education
Iowa

Dr. Marjorie East, Head
Department of Home Economics
Education
Pennsylvania State University

Dr. Lawrence Erickson
Head, Department of
Business Education
University of California
at Los Angeles

Dr. Carl Schaefer
Chairman, Department
of Vocational-Technical
Education
Rutgers University

2:15-2:45 p.m. BREAK

2:45-4:30 p.m. COMMITTEE MEETINGS

7:00-11:00 p.m. FILMS

WEDNESDAY, OCTOBER 23

8:30-11:30 a.m. COMMITTEE MEETINGS

1:00-4:30 p.m.

VOCATIONAL-TECHNICAL EDUCATION FOR TEACHERS OF THE DISADVANTAGED

TUESDAY, OCTOBER 22

10:00-11:30 a.m. SUB-SEMINAR MEETINGS

1:00-2:15 p.m.

Introduction

Dr. Sylvia L. Lee, Head
Home Economics Education
Oregon State University

Principal Speaker

Dr. Edmund Gordon, Director
ERIC Clearinghouse for the Disadvantaged
Yeshiva University

Task Force Member Reactions

Dr. Flossie Byrd, Dean
School of Home Economics
Prairie View A & M College

Dr. Herbert D. Brum
Supervisor, Disadvantaged
Youth and Work Study Programs
Ohio Department of Education

Dr. Marvin Hirshfeld
Chairman
Department of Distributive
Education
Temple University

Dr. Lloyd J. Phipps
Professor and Chairma
Division of Agricultural Education
University of Illinoi

Mrs. Mamie Sizemore
Indian Education
Consultant
Arizona State Department of Education

2:15-2:45 p.m. BREAK

2:45-4:30 p.m. COMMITTEE MEETINGS

7:00-11:00 p.m. FILMS

WEDNESDAY, OCTOBER 23

8:30-11:30 a.m. COMMITTEE MEETINGS

1:00-4:30 p.m.

THURSDAY, OCTOBER 24

8:30-9:30 a.m. THIRD GENERAL SESSION

Dr. Sylvia L. Lee, Chairman
Task Force Panels

8:30-9:00 a.m.

Differentiated Staffing

9:00-9:30 a.m.

Teaching the Disadvantaged

9:30-10:30 a.m.

Principal Speaker

Dr. Rupert Evans, Dean
College of Education
University of Illinois

10:30-10:45 a.m.

Closing Remarks

Dr. Robert E. Taylor

APPENDIX C

EVENING FILM PROGRAM

TUESDAY EVENING
OCTOBER 22, 1968
7:00 P.M.
SAN JUAN ROOM

Chairman: Miss Pat Smith
Research Associate
The Center for Vocational
and Technical Education

7:00-8:00 p.m. Mrs. Mamie Sizemore
Indian Education Consultant
Arizona State Department of Education

"A Demonstration in Indian Education"
(For availability of film, contact Mrs. Sizemore)

The film shows the use of innovative ideas as used in a public school on the Navaho Reservation at Tuba City, Arizona. These ideas are adaptable for other schools enrolling culturally different or academically handicapped children.

8:00-9:00 p.m. Dr. Robert A. Campbell (Illinois)

"First Program to Specifically Prepare Vocational-Technical Teachers for Laboratory Classes Designed for Students with Special Needs"

9:00-9:30 p.m. "The Quiet Revolution"
(Film available from: NEA Sound Studios
1201 16th Street N.W.
Washington, D. C. 20036)

This film depicts a variety of staffing patterns in five different schools that have initiated team teaching, flexible scheduling, non-graded elementary programs and a number of other innovations.

If American education is to be improved, the teacher must have time to plan, to analyze, to teach. The film suggests some alternatives to educators who are interested in action.

9:30-10:00 p.m. "Differentiated Teaching Staff"
(Film available from: Innovation Films
School of Education
University of Massachusetts
Amherst, Mass. 01002)

This film shows an approach to teaching which emphasizes a range of teacher competencies in a variety of staff positions. Points considered in the film include: retaining outside teachers, identifying teaching responsibilities, use of outstanding teachers, and a model for differentiation.

APPENDIX D

SUMMARY OF PARTICIPANT'S EVALUATIONS

1. IN YOUR OPINION, WHAT WERE THE STRONG POINTS OF THE SEMINAR?

The responses most frequently given by the seminar participants include the following: 1) the speeches given by the principal speakers, 2) the opportunity to work in committees to discuss the topics of the seminar, 3) the overall planning and organization of the seminar, 4) the excellent resource people, and 5) the opportunity to review the task force papers prior to attending the seminar.

Other responses recorded include the selection of the seminar topics, the desirable length of the seminar and the evening film program which provided the opportunity for participants to become familiar with the alternate sub-seminar.

2. IN YOUR OPINION, WHAT WERE THE WEAKNESSES OR CRITICISMS YOU HAVE OF THE SEMINAR?

In general, those who responded to this question indicated the following: 1) the committees needed more structure and more guidelines to go by; 2) there was too much time spent in committees; 3) there was need for the opportunity to get into different groups--particularly to have some exposure to the alternate sub-seminar, and 4) hotel arrangements were not adequate.

3. WHAT SUGGESTIONS DO YOU HAVE WHICH MIGHT IMPROVE THE SEMINAR FOR NEXT YEAR? (INCLUDE TOPICS OR PROBLEM AREAS)

A wide variety of topics was suggested for next year's seminar ranging from evaluation in vocational education to implications of the 1968 amendments, to innovative programs in teacher education and communications between vocational services. Also suggested were further refinements of this year's topics, preservice education, in-service education and post-secondary teacher education.

All suggestions are being reviewed and analyzed by Center staff in an effort to choose the most appropriate and timely topics for next year's seminar.

APPENDIX E

SEMINAR STAFF

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